



FROM SAWDUST

Lignin, waste product of paper and pulp mills, acts as the formative and binding agent for this plastic from sawdust.

neries. Experiments are now in progress which would make lignin available as a base for fertilizer.

Lignin is the stuff that binds the cellulose together in wood. It is wood's second most abundant constituent. Chemically, it is known to be related to cellulose and, like the latter, is made up of carbon, hydrogen and oxygen. But the size of its molecule and the arrangement of the atoms in it remain unknown.

This substance has to be eliminated in pulp manufacture, but does great harm when discharged into streams as a pulping liquor. Until now it has been almost totally a waste, so that processes which tend to adapt it for use are earnestly sought.

The Laboratory has also devised more efficient and economical methods of chipping trees to obtain "naval stores"—gum resin and turpentine; the drying of timber in salt solutions which eliminate the cracking and warping so usual in the old seasoning process and which saves the industry \$10,000,000 annually; fire-

proofing in which treated wood specimens are tested in specially designed combustion apparatus; the chemical impregnation of wood to prevent decay.

All these and many more experiments and projects are under way in Madison's House of Magic in an effort to make

available to America its greatest crop—wood—a crop which is growing as fast as it is harvested and which still has thousands of possibilities for the enrichment of our lives as well as for the protection of our way of life.

Science News Letter, March 14, 1942

ETHNOLOGY

Japanese In Hawaii Loyal Declares American Author

Not Only American-Born Youth, But Their Alien-Born Parents, Have Stuck With the Colors and Served

JAPANESE in Hawaii have proved loyal to the United States since the first bombs fell on Pearl Harbor, declares Prof. Blake Clark of the University of Hawaii, whose eye-witness book, *Remember Pearl Harbor!* has just been published. (*Reviewed, SNL, this issue.*) Not only the Nisei, American-born of Japanese parentage, but their alien-born elders who cannot become citizens, have stuck with the colors of their adopted land, he states, adding:

"Of all the 425,000 people in Hawaii, only 273—and by no means all of them Japanese—have been detained as suspicious characters."

First evidence came while the bombardment was just starting. Yamato and his wife Hatsu, alien-born Japanese servants in the house where Prof. Clark lives, were first incredulous, then stricken with horror and grief, at the treachery of their fellow-countrymen. The woman actually became physically ill. Subsequently Yamato did all the digging for the air-raid shelter in the back yard.

During the raid, two Japanese workmen helped one American soldier to set up a machine gun, and then aided so eagerly in feeding ammunition into it that both suffered burns from its heated barrel.

The Japanese naval officer who escaped from one of the disabled two-man submarines found a Nisei in American uniform waiting to take him prisoner when he swam ashore. The brown-skinned soldier forgot military etiquette to the extent of giving his captive a couple of cuffs on the jaw because, he said, "you're one of those (deleted) that's responsible for me being out here on guard duty at \$21 a month!"

Japanese members of the University of Hawaii faculty immediately put themselves at the service of the F.B.I. Japanese

surgeons treated the wounds of American soldiers and sailors, while Japanese bombs were still bursting about them.

Outweighing by far these individual deeds of courage and sacrifice, however, was the response of the Japanese community to the medical authorities' appeal for donors to the blood bank. People of all races and classes came crowding in together, but the Japanese who offered their blood outnumbered all other racial groups combined. The older people, alien-born, came dressed in the ceremonial black which their etiquette requires for formal occasions.

Many an American fighting man, wounded during the raid, is now able to man his gun or fly his plane against the aggressors today because he very literally has Japanese blood in his veins.

Science News Letter, March 14, 1942

NUTRITION—PSYCHOLOGY

American Soldiers Receive Daily Rations of Candy

AMERICAN fighting men at Bataan as well as American troops in action everywhere rate candy and tobacco along with their regular rations, as an aid to morale, according to Army Quartermaster Corps officers.

When the soldier is in action and can't get to a post-exchange for smokes and sweets, he gets a daily ration of candy, cigars, pipe tobacco or chewing tobacco as he prefers. The candy ration is one ounce; pipe tobacco one ounce, chewing tobacco one ounce; cigars, 20. If he rolls his own, he gets 100 cigar papers and two ounces of smoking tobacco. A box of matches is supplied every two days. Reasonable choice of brands is allowed on all tobacco.

Science News Letter, March 14, 1942

Languages Made *easy* By Linguaphone

Speak SPANISH, PORTUGUESE, FRENCH—or any of 29 languages—in an amazingly short time by the simplified, direct Linguaphone conversational method. In your own home listen to the voices of native teachers who lead you by easy steps to speak, read and write the language of your choice. Endorsed by the foremost language teachers. Used by a million home-study students. Send for FREE Book

LINGUAPHONE INSTITUTE
31 R.C.A. Building New York City