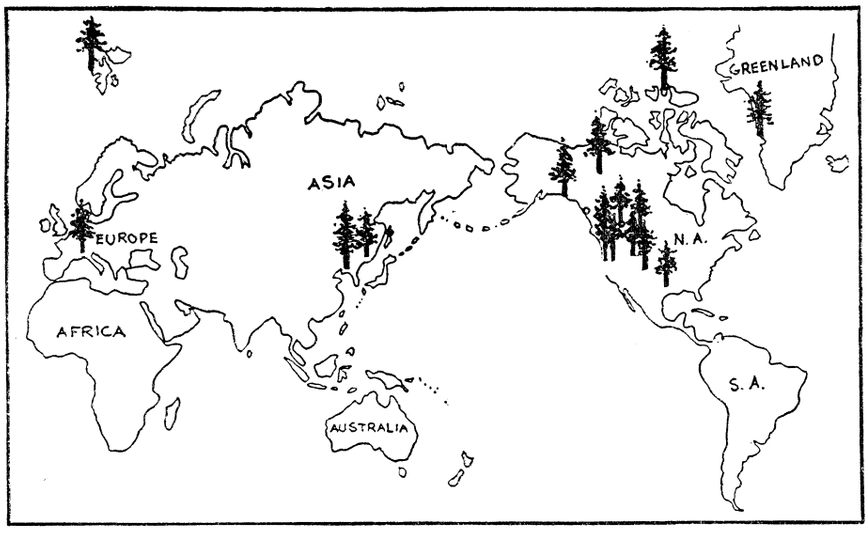

THE TREES on this map mark the places where fossil remains of redwood have been found; they are stations on the long trek of the trees. Note especially the spots in the Arctic regions, where the tallest trees now are dwarf willows barely four inches high

The March of the Redwoods

(*Continued from page* 98)

that when the Manchurian coal beds were being formed this ancient Asiatic land was at least a little more California-like than it is now.

As an interesting experiment, which will have to wait some years, perhaps even several centuries, for a complete answer, Dr. Chaney has planted near Peking and also in the Altai mountains a quantity of seeds of both the coast and the "big tree" species of the redwood. We may see the beginnings of the answer, our great-grandchildren will note further progress therein; no one knows how remote the human generation that will witness the death of these trees. As everyone knows, some of the "big trees" are older than Christendom.

More inwardly in Asia, in the same region where the dinosaur remains were found, Dr. Chaney has found other stone books with other botanical and climatological records. The lofty Khingan mountains, which separate Manchuria from Mongolia, drain the sea winds of their moisture, just as the high Sierras and Cascades drain the Pacific winds, making the great contrast between the moist coast lands and the arid inter-mountain plateau region. The contrast between present-day Manchuria and Mongolia is quite as marked, and the contrast during dinosaur days must have been even greater. For Dr. Chaney has been unable to find that the Gobi region has ever supported a rich forest of the Manchurian redwood type, or indeed any extensive forests at all.

During the Cretaceous period, which was the time of the dinosaurs, the

(*Just turn the page*)

CHEMISTRY—AGRICULTURE

To Aid Cornstalk Use

Hungary, the country that unwittingly sent the corn borer to threaten the corn crop, America's greatest agricultural industry, is now making amends in the person of Dr. Bela Dorner, the chemist who has shown how to extract from cornstalks millions of dollars' worth of cellulose, the basic raw material for paper, rayon, lacquers and other products. Dr. Dorner is now in this country cooperating with the Cornstalk Products Company who are about to go into quantity production at their plant in Danville, Ill.

In a statement to Science Service, Dr. Dorner expressed his pleasure over the reception accorded him in America, and spoke in enthusiastic terms over the prospects for turning the millions of tons of hitherto wasted cornstalks into scources of income for farmers and factory operators.

"The industrial hunger for cellulose is world-wide," he said. "It is even more pronounced in Europe than in America, but industrialists everywhere recognize that with new uses for cellulose appearing daily, new and cheaper sources must be developed."

Although he worked out his process in Europe, Dr. Dorner was thinking mainly about America as the place where it will have its highest development.

"In Europe we do not regard cornstalks as the waste which you consider them in the great Corn Belt of the United States," he said. "Although Hungary is the fourth country of the world in corn production, being in fact the Corn Belt of Europe, peasant farmers and small land owners use their stalks for fodder, and only on the large estates in some of the corn-growing provinces is there a surplus. In recent years the Hungarian government has compelled all stalks to be consumed or burned by April 1 to comply with corn-borer regulations.

"I am sorry to learn that this pest is spreadnig rapidly over the United States and that similar regulations must eventually be enforced probably in all corn-growing areas of your country. I am painfully aware that America traces this pest to an importation from Hungary; wherefore I am doubly proud of bringing to your agriculture and industry a Hungarian process for utilizing the cornstalks and making their destruction profitable. Cornstalk cellulose factories will be a boon to farmers wherever they are established.

"It is gratifying to learn that there is no unkindly feeling toward my country because we unintentionally sent you the corn-borer. We similarly recall in Hungary that the phylloxera pest which ravages our vineyards came from America, but we pray that you may not send us your Prohibition as the antidote!"

Dr. Dorner is one of the foremost industrial and agricultural chemists of Hungary. He has been connected continuously with the government service, in which he is completing his twenty-fifth year. The position he now occupies is equivalent to the directorship of the Bureau of Standards in this country, combined with that of chief of the Bureau of Chemistry in the Department of Agriculture.

Science News-Letter, February 18, 1928

HYGIENE

Watercress Has Vitamines

The list of foods the doctor says you should eat has been augmented by a new one, watercress.

This familiar garnish for meat and salad is a remarkably rich source of the vitamin necessary for growth and of the scurvy-preventing vitamin C, Dr. Katherine H. Coward and P. Eggleton of the University of London have found. It boasts of small quantities of vitamin D as well.

The green shows considerable seasonal variation, however, in its growth promoting properties, being more effective in this respect in spring and summer than in winter.

Science News-Letter, February 18, 1928