

FORESTRY

West Pine Yields Pitch

► THE Southeastern Atlantic coastal region, long the source of pine pitch for turpentine, rosin and other so-called naval stores, is facing a rival in the Northwest. Millions of stumps of western yellow pine are available there, from which it is now found that pitch for naval stores can be commercially extracted.

This western yellow pine is known to foresters as *Pinus ponderosa*. It is found in the northwestern states and as far south as Arizona. It is a forest tree, attaining an age of from 300 to 500 years, and often reaching a height of over 200 feet, with stumps up to eight feet in diameter. Little if any use has been made of the stumps left after logging, but now they may be pulled and processed to obtain their pitch.

It has been long known that *Ponderosa* pine stumps contain pitch, but quantity, quality and costs of extracting were uncertain factors. It is now known that the pitch can be extracted commercially. This is a result of work at the Portland, Ore., laboratory of the Western Pine Association, according to American Forest Products Industries, Inc., in Washington. It was found that stumps from trees cut up to four

years ago yielded an average of 340 pounds per ton, and older stumps yielded 500 pounds per ton in extracts.

The process for the recovery of the *Ponderosa* pitch from stumps is similar to that used for the same purpose in southeastern states for some 30 years. The stumps are yanked out of the ground and hauled to the factories. There they are reduced to chips by heavy machinery, and the chips are put in a solvent solution. This liquid absorbs the pitches, but is later easily separated from them. The solvent can be used over and over again.

Big, old *Ponderosa* stumps have been found best for processing. Their bark and sapwood, neither of which are pitchy, have been weathered away. An average aged *Ponderosa* pine stump on good growing land weighs a ton or more, and can yield up to 500 pounds of pitch extracts. Any number of old stumps are available in Washington, Oregon, California, Idaho, Montana and other western states. It remains now for the necessary processing factories to be constructed.

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PUBLIC HEALTH

Medical Care for All

► GOVERNMENT-SUPPORTED medical care for everyone is advocated by the new president of the American Public Health Association, Dr. Charles F. Wilinsky, administrator of Beth Israel Hospital and Deputy Commissioner of Health of Boston.

"The American Public Health Association is earnest in its belief that good health is something that every man, woman, and child has a right to have and to enjoy," he stated in an interview.

Sanitation and the control of communicable diseases have lengthened the life span of the American people. Now, Dr. Wilinsky pointed out, the diseases of middle life and old age, such as cancer and heart disease, are major health problems, and the line between preventive medicine and medical care can no longer be drawn.

No particular plan of government-supported medical care is supported by the association, however, because it does not know which is the best way. The possibilities are social insurance similar to social security, voluntary health insurance by private organizations, support by general taxation both federal and local, or some combination of these. However, its section of medical care, whose organization has just been announced, may well begin a study of the problem.

Any government-supported program

must be instituted gradually, it was pointed out, because the United States does not now have enough doctors, nurses and hospitals to give adequate health care to everyone.

As a goal, Dr. Wilinsky suggested an integrated hospital plan similar to the ones recently set up around Boston and Rochester. Small rural hospitals are linked to larger hospitals in small cities which can provide the services of laboratories and pathologists. These hospitals in turn have access to the facilities and specialists of the great teaching hospitals in large cities and universities. There is great need for more rural hospitals in the form of tax-supported public health centers recommended by the American Hospital Association which can combine limited medical care with sanitation and preventive medicine work.

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CHEMISTRY

Fire-Extinguisher New Fluid Safe in Ventilated Places

► A FIRE-extinguishing vaporizing liquid known as chlorobromomethane, a chemical compound containing chlorine, bromine and methane, is effective and safe to use

in well-ventilated places but may be a hazard in closets and small rooms.

This is the conclusion of Underwriters' Laboratories, Inc., sponsored by the National Board of Underwriters. It is based on extensive studies made to determine the life hazards of the fumes evolved by this chemical in contact with flame or hot surfaces under fire conditions likely to be encountered in practice. The complete results are given in a recent bulletin issued in New York by the laboratories.

The chief gaseous decomposition products of chlorobromomethane applied to gasoline, ethyl alcohol and wood fires, and to gas flames, hot iron surfaces and electric arcs, include hydrochloric acid, hydrobromic acid, carbonyl halides, and in some cases free chlorine and bromine. The concentrations obtained depend upon the quantity of chlorobromomethane applied, the fire conditions, and the degree of confinement of the fumes.

The odor of chlorobromomethane resembles that of chloroform and can not be said to give adequate warning of danger. One quart of the chemical on evaporation produces nearly 12 cubic feet of vapor at ordinary room temperature. In a room of 1,000 cubic feet capacity, the resulting concentration of vapor will be in the order of 1.2% by volume. In concentrations of 0.8% to 1% by volume in air the vapor has marked and prolonged anesthetic effects on guinea pigs.

The concentrations of chlorobromomethane vapor resulting from the application of this extinguisher chemical to fires occurring in open places may not endanger life on temporary exposure, the report states, but when used in unventilated places, operators and others should take precautions to avoid the effects which may be caused by breathing the vapor or its decomposition products.

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ENTOMOLOGY

DDT and Oil Spray Can End Hazards of Black Flies

► A CHEAP and easy way of overcoming the hazards of black flies, which are not only a nuisance to vacationists, sportsmen and hunters but also a source of economic loss to farmers and ranchers at times of flood and high waters, was reported by the Army Medical Department at the meetings in New Orleans of the American Society of Tropical Medicine, National Malaria Society and American Society of Parasitology.

Five dollars' worth of material and a few hours of labor are all that are needed to reduce the black fly hazard on a farm, ranch or plantation.

A man with a two-quart spray gun loaded with DDT and oil may stand on the side of a stream with the wind at his back and spray the surface of the water so that currents will carry the film of

DDT as far as 25 miles downstream. A tenth of a pound of DDT per acre of land is the correct amount to use. Directions for spraying without hazard to fish and other valuable animals can be obtained from the U. S. Department of Agriculture.

DDT was credited by an Army entomologist, Maj. Frederick W. Whittemore, with being the best of currently used agents

for protecting wool cloth against damage by moths and other insects.

"This discovery," Maj. Whittemore said, "made by a Department of Agriculture scientist, will mean an inestimable saving to the government in preserving its woolen goods in storage as well as to individuals in civilian life."

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PSYCHOLOGY

Women's Fashion Leaders

Paris and New York designers do not have complete power over fashion trends, a recent study has revealed. The average woman seems to have a mind of her own.

► PARIS designers and New York modistes may think they lead the fashions, but they actually can lead them only just so far.

Mrs. Main Street puts a very definite limit on the power of the fashion czar. The firmness of the average woman in resisting being pushed too far by either the "New Look" or any other fashion trend is revealed in a study of fashions over a 19-year period.

Styles from *Vogue* and the *Woman's Home Companion* were compared with actual photographs appearing in such magazines as *Review of Reviews*, *Literary Digest*, *Outlook-Independent* and *Life*, and showing what actually was being worn. Results are reported by Nancy Koplin Jack and Betty Schiffer of Pennsylvania State College in the AMERICAN SOCIOLOGICAL REVIEW.

In general the study showed for both styles and photographs the same ups and downs of hemline. A lowering of hemline during the depression years of 1929-1932. A low hemline plateau from 1932 to 1936. A gradual rise in hemline up to the 1939 high. A high hemline plateau 1939-1942. Here the natural course of fashion was interrupted by Government order L-85 which limited the use of material in ladies' long skirts. But then came a drop in the hemline from 1945 to 1947.

When hemlines drop, they go down faster in the fashion magazines than on the streets. But when they go up it is the average woman who leads the leaders but she doesn't go as far. During the late 30's and early 40's she was wearing her skirts just a little longer than was being prescribed by the fashion magazine.

The more extreme the dictated hemline, the greater the non-conformity of the average woman, it was found. But if the designers kept within limits, she follows readily enough.

The woman five feet six inches tall prefers a length roughly 14 inches from the floor. The woman five feet tall prefers to have her skirts only 12 inches from the ground. This means, the investigators point out, that the hem height most preferred is

just about one fourth of the distance from the floor to the V of the neck.

The investigators ran into a surprise in the course of their study. They had originally selected *Vogue* as representing the extreme of fashion and the *Woman's Home Companion* as being a mid-point between those styles and the taste of the ordinary woman. It turned out to be the other way around. The WHC is more extreme than *Vogue*. And their styles change more precipitately than do those of *Vogue*.

Science News Letter, January 1, 1949

FORESTRY

Air Photographs Valuable In Studying Timber Areas

► AIR photographs are of great value in sizing up the commercial timber possibilities of an area, Karl E. Moessner of the Central States Forest Experiment Station told the meeting in Boston of the Society of American Foresters. They not only show what kinds of trees are present, and in what sizes and numbers, but also indicate to the properly trained eye the height and steepness of the hills and the general character of the soil.

One thing that has to be taken into account in interpreting air photographs, Mr. Moessner pointed out, is the greatly exaggerated heights given to all objects by the stereoscopic air camera. This exaggeration can, however, be turned to real advantage in identifying trees and studying slopes, once it is properly allowed for.

Science News Letter, January 1, 1949

MEDICINE

Warn Against Blind Use of Penicillin for Colds

► A NEW REASON why your doctor may not prescribe penicillin for every cold or sore throat you have this winter appears in a report by Drs. Jay Ward Smith and Arthur L. Bloomfield of Stanford University Medical School.

Penicillin, they find, produces a pro-

found change in the bacterial "balance of power" in human throats. Upsetting this balance by driving out some bacteria with penicillin may give new and perhaps harmful ones the ascendancy. The sore throat germ might be banished only to let some more harmful one have a chance to prey on the patient.

"Our findings support the position that it may be unwise to give penicillin blindly to every patient with a sore throat or a cold," the Stanford physicians warn.

It might be better, they suggest, to give penicillin only after cultures show the presence of a disease-causing germ which seems to be playing an active part in the disease the patient has.

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PUBLIC HEALTH

Fight Against Flu Part Of World-Wide Program

► A PLAN aimed at preventing recurrence in this country of a serious epidemic of influenza like that of 1918 has been developed by the Surgeons General of the Army, Navy, Air Force, and Public Health Service.

The plan is part of an international program set up by the World Health Organization last year to study influenza and to aid physicians and health officials in the control of the disease. An Influenza Information Center to serve as headquarters for the program in the United States has been established at the National Institutes of Health, Bethesda, Md.

The specific objectives of the worldwide program are (1) to identify new strains of influenza virus as these appear and (2) to evaluate their usefulness for incorporation into influenza vaccine.

Prompt reporting by local physicians and health officers of all suspected cases of influenza is essential to the success of the program, because of the explosive character of most influenza epidemics and their exceedingly rapid spread over extensive areas.

The program will operate as follows in the United States:

As soon as a significant outbreak of respiratory disease suspected to be influenza has been reported in a given community, the Influenza Information Center will alert diagnostic laboratories in the region, asking them to carry out serological tests on patients for the presence of antibody against the influenza virus. Certain laboratories will also be asked to assign to the affected community a team of investigators experienced in the techniques of isolating the virus.

As soon as these investigators have isolated a new strain of virus, they will send it at once for a complete antigenic analysis to the Strain Study Center of the Influenza Commission, Army Epidemiological Board at Long Island College of Medicine, Brooklyn, N. Y. Appropriate strains of the virus which have been isolated will be considered for possible inclusion in commercial vaccine.

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