

Weyerhaeuser Hardboard Development Gives New Role To Lowly White Fir

During the last ten years industrial scientists have poured hundreds of exciting new products from their test-tubes. Advertising copywriters have sharpened their pencils and their adjectives to create a familiar ring to some words little known a decade ago: uranium, isotopes, fiberglass, vinyl, neoprene, koroal, univac, etc.

American industrial ingenuity has worked at top speed to provide better products, new products, things which add life, strength, beauty, versatility, function to the implements of our everyday life.

Many so-called man-made fiber products have been introduced, particularly in textiles; silk has bowed to nylon, wool is worried by orlon, dacron is invading sock counters in the nation's department stores.

Though man-made fibers have made headlines during this post-war decade, Weyerhaeuser development men have made dramatic

strides in freeing the natural fibers of wood — man's oldest raw material — and recombining them into new shapes for an impressive number of industrial and consumer uses.

Latest Weyerhaeuser development in the field of whole-wood fiber products is hardboard, which began commercial-scale production last month in a new, specially designed plant in Klamath Falls, Oregon.

Weyerhaeuser hardboard is the result of 15 years of aggressive study, carefully planned development, pilot-plant trials, and intensive market exploration. This versatile forest product is entering the market via a new manufacturing process which gives it a superiority in performance and utility.

C. C. Heritage, Weyerhaeuser's director of development, and Hugh B. Campbell, the company's Klamath Falls branch manager, describe

the plant and products as entirely different from anything previously known in the hardboard field.

"The basic raw material of our hardboard," Campbell said, "is white fir — abies concolor — a species which grows in the western pine area. In the past white fir has had relatively low merchantable value, although we have used it in the manufacture of both lumber and box shooks. Now, with this new hardboard plant in production, we have perfected an important use for this species which occurs abundantly on our Oregon pine-area farms."

Heritage pointed out that the plant is unique in its flexibility. "Instead of limiting production to a single line of hardboard products, these facilities were planned so that we can manufacture a line of custom-tailored boards to meet the exacting needs of various industrial users and processors."

In manufacturing hardboard, Weyerhaeuser literally takes a tree apart, processes the ultimate whole wood fibers, and reconstitutes them into an entirely new form of wood which then has a host of added, bonus qualities.

After the white fir logs are chipped into pieces of uniform size, the chips are conveyed into one of three Asplund defibrators. The machines reduce the wood to ultimate whole-wood fibers, unchanged from their natural condition in the tree, by rubbing the chips apart. This defibrating is done in an atmosphere of moderate steam pressure. If required, additives are introduced for tailored uses during the defibrating.

The defibrating completed, the fibers are further processed and modified by Weyerhaeuser-developed innovations. They are continuously felted from air suspension then hot-pressed into boards, humidified to prevent warpage, trimmed and cut to specified size. "Weyerhaeuser Timber Company," Heritage emphasized, "is first to produce hardboard by a dry process using Asplund-defibrator fiber."

Three types of hardboard are being made at Klamath Falls: standard, treated and tailored-to-use. The latter category is in

Good Mental Attitude May Be Help Against Cancer

(The March of Science: Mental Defense Against Cancer)

By ALTON L. BLAKESLEE
AP Science Reporter

HOUSTON, Tex., Feb. 8 (AP) — A happy, calm mind may be a good defense against cancer.

So far there is a little evidence that being serene emotionally can slow down the growth of cancers. Studies under way here are going even further to learn if the ability to handle the stresses of life easily could prevent cancers from developing.

There is a tie-up between some kinds of cancers and the body's output of hormones. Certain hormones make some cancers grow faster. And many kinds of stress, from worry to fear, anger, frustration, excitement, can stimulate the output of hormones.

This interconnection between emotions, glands, and cancer is the basis of new cancer being made at M. D. Anderson Hospital for Cancer Research of the University of Texas by Drs. Beatrice Cobb and Jack Wheeler, psychologists of the Department of Psychosomatic Medicine, and Dr. Jack Trunell, head of Experimental Medicine.

A first step concerns men with cancer of the prostate gland. This gland produces a chemical, an enzyme known as acid phosphatase, which is a pretty good barometer of how active the cancer is. More enzyme gets into the bloodstream when the cancer is growing actively; less when the cancer is quiet or under control.

The medical team sometimes finds a sharp drop in the enzyme when men with this cancer enter the hospital for treatment. The mere fact of being in the hospital makes the cancer grow slower.

Why does this peculiar thing happen? A reason could be a change in mental outlook, more peace of mind. The man may no longer be worrying about whether to seek treatment, or may have overcome his fear of surgery, or is avoiding stress because now the hospital, not himself, is responsible

for decisions.

If that's true, then any new stress or worry should increase the enzyme in his blood, meaning his cancer was growing again.

To test this, Drs. Cobb and Wheeler are trying to create psychological stresses. In one experiment, a man was made to feel frustrated, angry at himself. There was a sharp increase in the tell-tale enzyme during three days of the test, then it dropped when his problem was solved. But the increase had appeared a day before the test began, and so could be coincidence.

More persons will be tested to see if stress affects the growth of cancers of the prostate, the breast, thyroid, and melanomas or black cancers.

It's known that male sex hormones can make prostate cancer grow faster. A treatment is to remove the male sex glands, and often slows cancer growth, or brings the cancer under control.

MORE

RECRUITER
TECUMSEH, Okla. (AP) — State Trooper George Moore, questioning four young airmen from Sheppard Air Force Base, Tex., about a minor traffic accident, thought the faces looked familiar.

Wanted? Not quite.

He had inducted the four while serving as a recruiting sergeant at Tahlequah, Okla., two years ago.

Southbound Mainliners
Leave at 6:05 P. M.
SAN FRANCISCO 2 1/2 hrs.
LOS ANGELES . . . 5 1/2 hrs.

Northbound Mainliners
Leave at 11:25 A. M.
PORTLAND . . . 2 1/2 hrs.
SEATTLE . . . 3 3/4 hrs.


Fast, luxurious flights to "all the East"

For travel information, call or write United.

Airport Terminal, Call 2-2557 or your travel agent.

COMPARE THE FARE AND YOU'LL GO BY AIR

FAST • FINE SERVICE



Southbound Mainliners
Leave at 6:05 P. M.
SAN FRANCISCO 2 1/2 hrs.
LOS ANGELES . . . 5 1/2 hrs.


Northbound Mainliners
Leave at 11:25 A. M.
PORTLAND . . . 2 1/2 hrs.
SEATTLE . . . 3 3/4 hrs.

Fast, luxurious flights to "all the East"

For travel information, call or write United.

Airport Terminal, Call 2-2557 or your travel agent.

COMPARE THE FARE AND YOU'LL GO BY AIR



Montgomery Ward
9th and Pine Phone 3188



WASHABLE NYLONS
White or Creamy Pastels
Fleecy-soft 24.75 Sizes B to 16

Smart way to enjoy the flattery of white or creamy pastels and save on cleaning bills. Each fleecy, spring-fresh Topper completely washable for the fabric, the lining, the shoulder pads, the thread are all 100% nylon. White Toppers come with their own plastic bags. All are moth-proof.

a class by itself. The tailored panels can be designed to take various stresses, to be cut by special tools, and to take various finishes, depending upon the customer's specific requirements.

Both the standard and treated Weyerhaeuser hardboards score highly in their basic characteristics. In appearance, they have a uniformity of color, smoothness, surface texture (fiber fineness), and gloss; the surface is hard, the edges clean-cut and rugged. They have exceptional durability — stiffness and transverse strength, impact and abrasion resistance.

The boards are readily handled, transported, and applied through their uniformity of thickness and density. In regard to permanence, the boards have the ability to withstand, without undue change, exposure to moisture, heat, sunlight, air, microorganisms, vermin, rodents, and wind; they are dimensionally stable.

These boards are exceedingly workable, having the ability to take nails and screws without damage. They can be cut with knife edges, polished by buffing, easily and cleanly drilled, punched without burring, bent to permanent contours, sawed, flexed, sanded, painted without bleed-through, and can take a baked-on enamel.

In all their important characteristics, the boards have high degrees of uniformity, especially in color, thickness, density and smoothness. The treated board, by choice of raw materials and processing conditions, including pressing to higher densities, provides a board of superior characteristics.

Weyerhaeuser hardboards may be smooth on one side and a screened texture on the other, or smooth on both sides. These hardboards have great internal bond strength which permits short-radius bends and close edge-nailing, and provide good gluing characteristics either to hardboard itself or to other materials. The smooth surface has a good affinity for paints and finishes.

Generally, Weyerhaeuser hardboards will go to four classes of customers: retail lumber dealers, distributors, industrial firms who will use it in their products, and to fabricators who will cut and shape the board for special uses.

The end-uses for hardboards are practically limitless, in that new uses constantly are being developed. However, some of the current items in which hardboard appears are television cabinets and backs, auto parts, floor underlayment, mirror backs, furniture panels, drawer bottoms, sliding cabinet doors, display racks, core materials for veneers and metals and plastics, perforated board, plywood and - hardboard combinations called "Pylon," die-cut boards, template boards, interior dry-wall panels, tiling, millwork items, toys, novelties, containers, window valances, home radiator covers, window seats, card table tops, bed headboards, waste-baskets, door panels, and many others.

The regular types of Weyerhaeuser hardboard are being made in four thicknesses: 1-10th-inch, 1/8th-inch, 3-16th-inch, and 1/4th-inch. The

board intended for floor underlayment will be planned to 7-32nds of an inch thick. Tailored boards can be made in varying thicknesses, densities, and types. Panel sizes for all types and thicknesses will be four feet wide and up to sixteen feet in length.

R. D. Pauley, special products division manager, formerly manager of the company's Longview, Washington, development center, and his successor in the latter position, J. R. Roberts, implemented the project, and Roberts has supervised the new Klamath Falls plant shakedown period. For nearly three years, the development center's process engineering section headed by Jack Sheridan, ran more than 25,000 press loads of hardboard through the pilot plant. Process Engineers Norman Briggs and George Matter estimated that three-quarters of a million square feet of hardboard were made during that period and sold by marketing-exploration men. R. O. Bathany, development center project engineer, was active in liaison work.

The laboratory end of hardboard development was done by a team spearheaded by the center's applied chemistry section chief, Arne Esterer. Special process machinery was engineered by a team led by Arch McKeever of the center's mechanical engineering section. General plant engineering was accomplished by the company's Tacoma engineering department, headed by J. S. Abel. Jack Robinson, originally the hardboard program's project engineer, was

later appointed to superintend the new plant by Ralph R. Macartney, recently retired Klamath Falls branch manager.

In Klamath Falls, construction was supervised by Dale Alter, the branch's chief millwright.

Preliminary market investigation during 1949-50 was done by Roberts. The development center's John Crosby later handled the field trials and customer contact for pilot-plant production from Chicago. Still later, the company's special products division staff helped in market exploration and sales.

Weyerhaeuser Sales Company has named R. T. Miller, St. Paul, Minnesota, to be manager of hardboard sales. He has a specially trained hardboard sales staff now in the field.

One thousand feet (log scale) of white fir will make 4,000 square feet of 1/2-inch hardboard. The plant will probably process about 25 million feet of white fir per year.

The plant is completed; the presses are turning out a new Weyerhaeuser forest product; 15 years of development now pay off. The implications and benefits of this hardboard plant are widespread.

To its customers and users, hard-

board is a superior product, specially designed to do a better job for them.

To the town of Klamath Falls, hardboard means 125 new jobs and more community stability.

To the company, hardboard means a broadened marketing base and another step in forest-harvest utilization.

To the development center, hardboard means another new forest product has been successfully created, introduced, and accepted. New uses are being found for nature's fibers — grown on tree farms.

Quick! Break Up Congestion of Kids' CHEST COLDS

is nose, throat, upper bronchial tubes. Rub on Child's Mild Mustrale — made especially for kiddies. Mustrale strongly creates a protective barrier on chest, throat and back. It relieves coughs, and helps break up local congestion. Recommended by many leading baby doctors! Buy today!

Child's MILD **MUSTEROLE**

A and B PAINT STORE
PAINT AND WALLPAPER HEADQUARTERS
YOUR SHERWIN WILLIAMS DEALER
1229 E. Main Phone 3324

9th and Pine *Montgomery Ward* Phone 3188

VALENTINE GIFT HITS IN NYLON



NYLONS—PRETTY AND PUCKERED

Big gift values. One Blouse features rich coin buttons, the other, charming for pompons. Puckered nylon needs little or no ironing, always looks so fresh. See them all. White, soft pastels. 32 to 38. 2.98 each

MATCHED LINGERIE SET

Four wonderful ways to delight her on Valentine's Day. Fashions for her private life in long-wearing nylon tricot — her favorite lingerie fabric. A pleasure to care for — they wash easily, dry in a jiffy and need no ironing. All most appropriately lavished with dainty heart motif nylon embroidery. Straight as cupid's arrows — these exquisitely styled lingerie selections will fly to her heart. Lovely in snowy white.

A "Show-Off" Slip. Elaborate embroidery at front and back. Lined bodice. Sizes from 32 to 40. 4.98

B Flouncy Petticoat. Deep trim of ruffled embroidered nylon sheer. Small, medium, large. 3.98

C Pert Camisole. Lavished at front and back with dainty embroidery. Fully lined bodice. 32 to 38. 2.98

D Short Flare Panty. Gently ruffled embroidery trim at leg openings. Sizes from 36 to 42. 1.98

12-DENIER; 60-GAUGE NYLONS

F So feminine with its accented outline heel for leg flattery. Sheer, but strong, 60 gauge construction for added mileage per pair. Full fashioned. New spring shades with contrasting dark seams. 8 1/2-11. 1.15 Pair

12-DENIER; 66-GAUGE NYLONS

G The valentine-perfect gift in delightfully sheer Carol Brents. These exciting 12-denier 66-gauge sheers are perfect for all special occasions. Full-fashioned with exquisite self seams. Sizes 8 1/2 to 11. 1.25 Pair