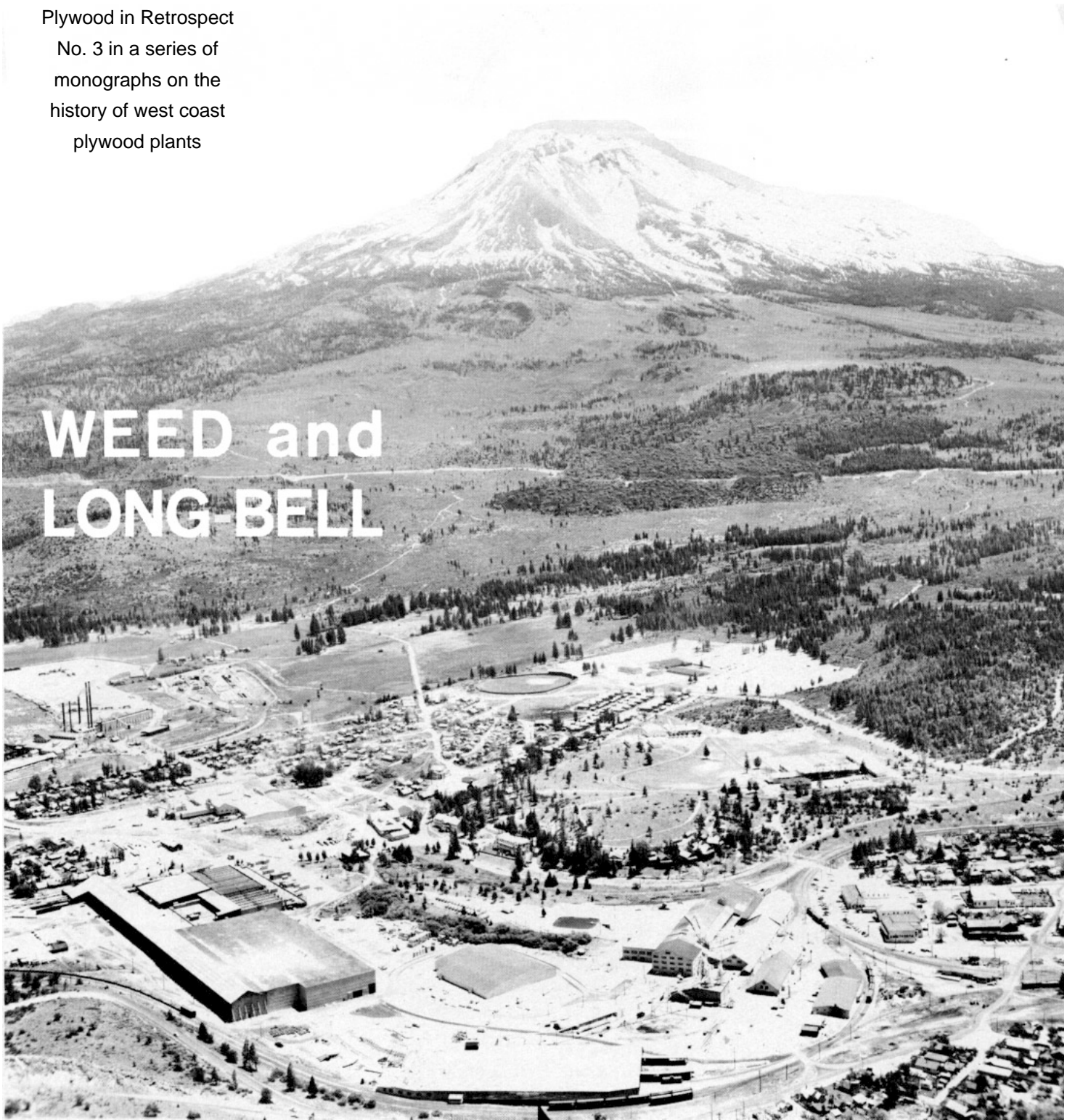


Plywood in Retrospect
No. 3 in a series of
monographs on the
history of west coast
plywood plants

WEED and LONG-BELL



Today . . . A Division of International Paper Company

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In Memoriam

The Plywood Pioneers dedicate this monograph to the memory of one of its charter members:

J.M. "Jude" White, Sr. 1886-1967



1919 – 1948
General Manager
Weed Lumber Company



1948 – 1954
President
The Long-Bell Lumber Co.



1954 – 1967
Director and Member
Advisory Committee

Mr. White was associated with the lumber business and the Weed area since 1906 when he went to work on the green chain for the Weed Lumber Company. In 1918 he was made General Manager of the former subsidiary of Long-Bell, which later became Long-Bell's Weed Operations. Mr. White was General Manager at Weed for 30 years.

In 1947 Mr. White was elected a Vice President and member of the Board of Directors of the Long-Bell Lumber Company. A year later he was named President of Long-Bell and served in that position until retirement in 1954. He continued as a Director and Member of the company's Advisory Committee following retirement.

The twentieth century opened with The Long-Bell Lumber Company forging ahead in the growth of its associated manufacturing plants and its wholesale departments. The need for plywood panels for its door plant at Weed, California brought

Plywood Production to California

The plywood plant at Weed was the first in California – the first to produce panels of Ponderosa pine – the third plant to be built on the West Coast and the oldest West Coast plywood plant now in operation.

Thanks to a policy of continued modernization it is today one of the important units of International Paper Company's Long-Bell Division which is today producing nearly 350 million square feet of plywood annually.

In January of 1904 the Directors of The Long-Bell Lumber Company decided that it would be advantageous to secure mill interests and timber on the Pacific Coast in view of the rapidly increasing demands for western woods, particularly shop material. The Weed Lumber Company, Weed, California, seemed to meet its requirements. So R. A. Long purchased a substantial block of Weed's capital stock. At the time of the stock purchase Weed Lumber Company was operating a sawmill and a small box factory. It had timber holdings amounting to approximately 1,200,000,000 feet. A new sawmill was under construction. Other stockholders included Abner Weed, founder of the company, George Wendling, Herman Nathan and S. O. Johnson.

Long-Bell increased its holdings and the year 1906 saw the Weed Lumber Company making extensive expansion in the manufacturing departments, including a new sash and door factory which by 1909 was producing 1,000 pine doors in a single ten-hour shift.

By 1911 the need for pine plywood panels for its one- and two-panel pine doors prompted the company to build the first Ponderosa pine plywood plant on the West Coast. It was a natural as the company had been operating a small veneer lathe for box shooks for the box factory since 1906.

The recorded history of this first plywood plant is very sketchy. It was located in a new one-story building not far from the mill pond. The equipment consisted of one eight-foot Coe lathe; a hand-operated veneer clipper; a tunnel dryer, sometimes referred to as the "prune dryer;" a Perkins glue spreader, some Francis jack presses and trim saws. The veneer blocks were chained down in water-filled open type concrete vats and boiled for 48 hours before being peeled in the lathe.

The name of the first superintendent of this new department is not recorded. However, J. M. "Jude" White, who started with the company in 1906, gave me the line-up in a recent interview, about as follows: George X. Wendling was President and Charles E. Evans the General Manager. Sid Cornish was the new plant's foreman and Leonard Gilly lathe operator. Some other early superintendents and foremen included Carl Hall and Joe Davidson. White, himself, subsequently became assistant to W. H. Cox, President, in 1916 and General Manager at Weed in 1918. He was named President of Long-Bell in 1948.

During 1919, after World War I, the plywood plant received the first elements in what has proved to be a continuing program of modernization of equipment and manufacturing processes.

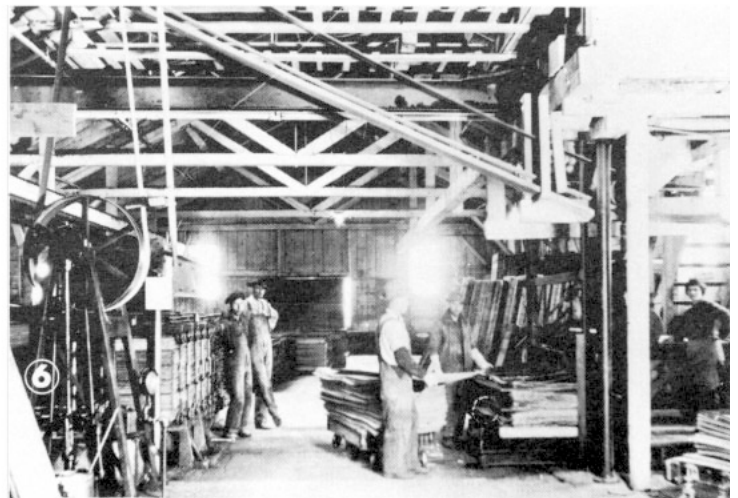
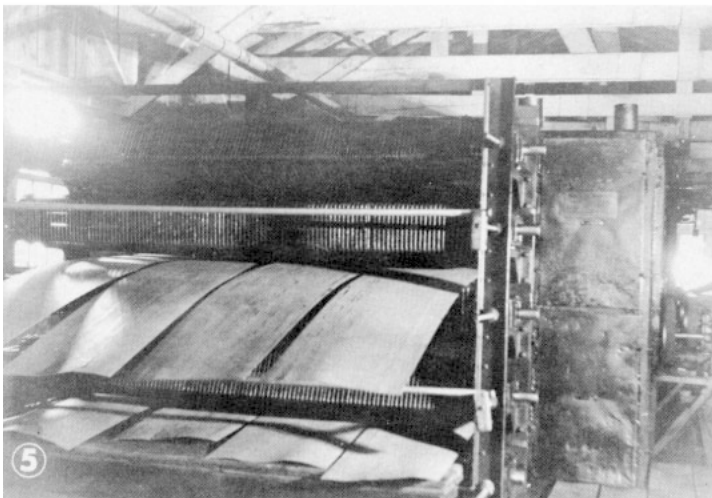
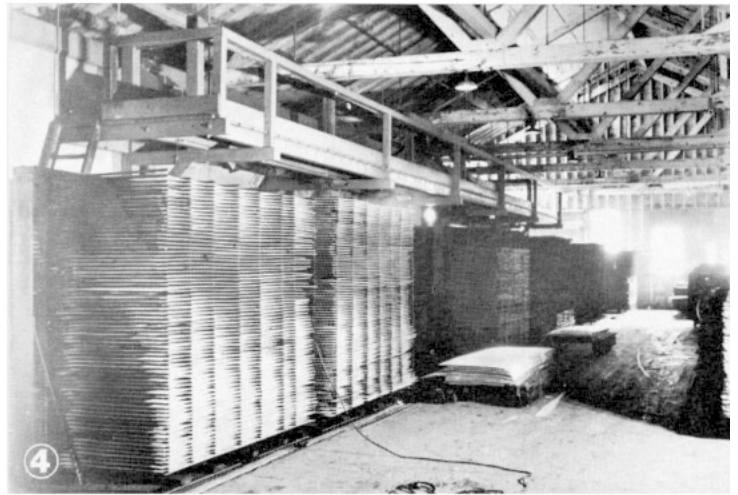
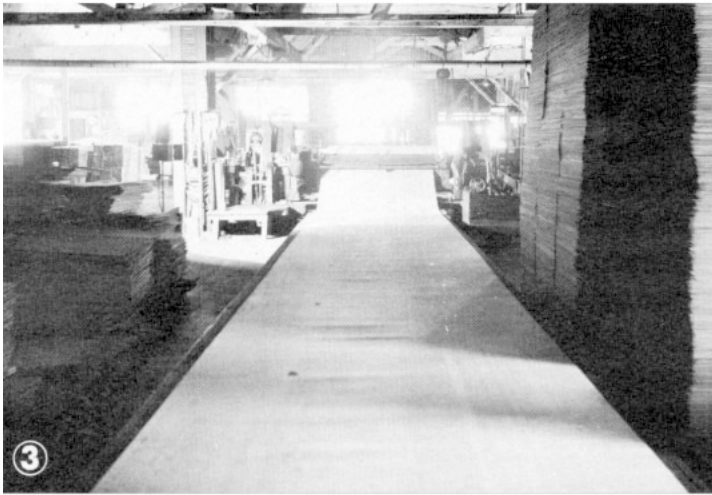
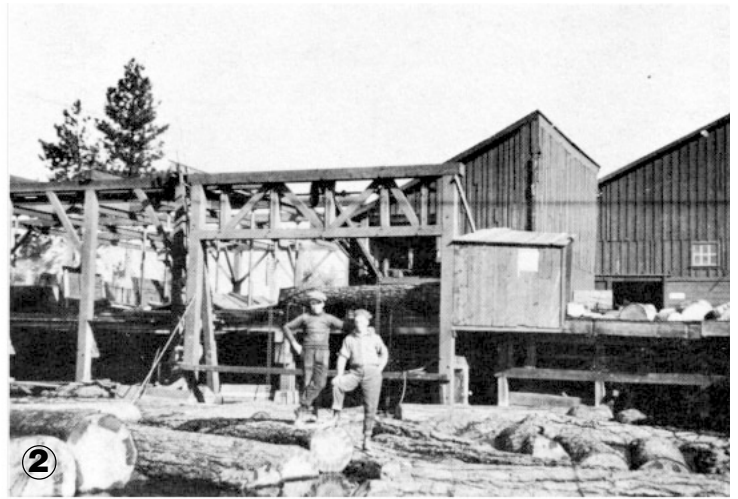
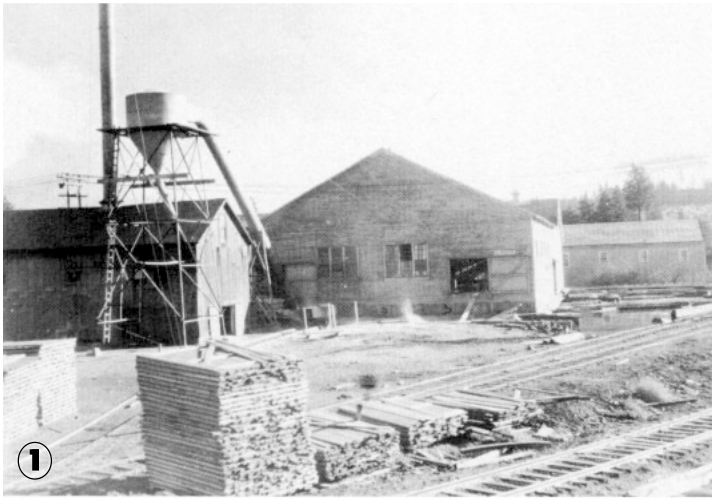
Bruce Clark, a young man of considerable plywood experience in southeastern hardwood plywood plants, and who had just been mustered out of the Air Corps, came to Weed to take over the modernization of the plant and its operation. He was made superintendent of veneer and plywood manufacturing.

A new mechanical Proctor dryer was installed. The glueing process was rearranged. The Francis jack presses were replaced with a hydraulic ram press and the use of press boards and retainer clamps. New type power-fed rip and cut-off saws were installed. A new three-drum sander was added to the plywood department's equipment.

The manufacturing process, as described in the September, 1920, "Log of Long-Bell" by Bruce Clark, reads in part:

"All log trains from the woods, when they reach the big sawmill pond, are met by a grader from the veneer plant who puts his mark on certain carefully selected logs . . . These logs are cut into blocks and placed in large concrete vats and boiled for 48 hours . . . An electric crane lifts the prepared blocks from the vats and places them on a platform where the bark is easily removed.

"The peeled blocks are next swung into the rotary veneer lathe by means of an electric hoist. The circumference of the block is revolved against a long, straight knife in such



1. The original Weed plywood operation was housed in this building.
2. Log pond and log deck.
3. Original Coe lathe and single deck tray.
4. Veneers stacked for drying in the "prune" dryer.
5. New mechanical dryer installed in 1919.
6. New hydraulic press also installed in 1919.
7. First plywood foreman of record: Sid Cornish.

a manner that an unbroken sheet of veneer is run out on a conveyor table. A second table directly ahead of the first, delivers these big sheets – eight feet with the grain, and sixty feet across the grain – to a clipper . . . In order that every usable piece of clear veneer may be saved, each sheet is cut separately instead of piling up a considerable number of sheets on the table to be cut at one time.

“The material is then put through a big conveyor drier, four girts or conveyors high, and fed from both ends continuously . . . Then the final grading and matching is done before glueing.

“In glueing the three pieces to form a panel, vegetable glue is used . . . In building pine panels 3/8 of an inch thick, a form is placed on a press carriage and about fifty panels built up on it. Then another form is placed on top of the pile. This ‘bale’ is run into the hydraulic press and an average pressure of one hundred pounds per square inch of surface is applied. Retainers are put around the bale which will hold the pressure as long as wanted; then the bale is carried out of the way and left until the following day when the retainers are removed. The panels are then ready for trimming.

“Double cutting power feed rip and cut-off saws are used for trimming. Three-drum sanders are used where the panels are to be sanded.”

Prior to this first expansion program the plant was producing at the rate of 10,000 square feet of three-ply panels per day. In 1921 after the changes were completed, the plant had a rated capacity of 25,000 square feet of three-ply panels for each eight-hour shift.

Bruce Clark resigned in mid-1921 to become manager for the Veneer Products Company, a new plywood company building in Tacoma, Washington. Jewell D. Lowe, who started with the Weed Lumber Company in 1913 and was lathe operator under Carl Hall, had become plant foreman under Bruce Clark. He was made plant superintendent; however, he followed Clark north. Harry Davidson became superintendent, which position he held for many years.

Sales during the early days were no problem. All the top grade went into door panels for the door factory. The grade-outs were sold to trunk and furniture factories for use in the manufacture of trunks, furniture backs, and drawer bottoms. The lowest grade of veneer not needed for core stock went to the box plant to be made into box shook and boxes.

W. S. Nurenborg who was selling for Wendling-Nathan Lumber Co. of San Francisco in and around Kansas City from 1910 to 1912, reports that he sold some of Weed’s Ponderosa pine plywood panels just prior to his going with

the Wheeler-Osgood Company of Tacoma, Washington in 1912.

Although the Long-Bell interests owned a majority of the stock of the Weed Lumber Company, in 1919 it did not market the sash, doors, box material or plywood products of the Weed plant, confining its efforts to the sale of its lumber. The plywood products, excluding door panels, were mostly sold through Wendling-Nathan and Homer Maris of San Francisco, who for some time had exclusive sales representation for northern California.

In 1920 Long-Bell Lumber Company announced the formation of its sash and door department “to handle sash and door products from the Weed Lumber Company.” Earl Kenyon was named manager of the new department.

During the decade 1920-1930 no drastic changes were made. Certain individual pieces of equipment were replaced as new and more efficient ones were developed. Certain methods of handling and processing were kept up-to-date. “This was the period when Long-Bell was concentrating its expansion efforts at Longview,” to quote “Jude” White. This was followed by the depression decade.

During the two-year period 1938-40 the demand for plywood in the United States doubled and Long-Bell decided its Weed plant should again be brought up-to-date. Thomas E. Heppenstall, industrial engineer and Assistant Vice President at Longview, recommended to J. M. White, Manager of the Weed operation, the employment of Andrew J. Honzell of Everett, Washington for the job. “Jude” followed his recommendation and in 1941 Honzell replaced Joe Murray who was acting superintendent at the time.

Under Andy Honzell’s direction, a four-line tray system, replacing the old single line, was installed; the old Proctor dryer was replaced by a new modern Moore dryer. The old three-drum single-deck sander was replaced by an eight-drum double decker (Yates American) and a 16-opening Williams White hot press was ordered. A. J. “Cotton” Myers took over in 1943 and the expansion was continued under his direction. The hot press was installed. The old Coe lathe was replaced by a new Merritt; a second Moore dryer was added, and a modern “no clamp” cold press was installed.

New tunnels for steaming the logs were installed to replace the old boiling vats which had been discarded when the roller pressure bar for cold peeling replaced the old solid nose bar. Steaming of the logs was found necessary during the cold winters at Weed when the logs would freeze and cold cutting would not produce satisfactory veneer.

Completion of this expansion program, which was considerably delayed during the war period 1943-46, was finally achieved in 1948. The Weed plant now had a daily capacity of 130,000 square feet three-ply.

Following the war came a great boom in the plywood industry on the West Coast. Production rose from 1.4 billion square feet in 1946 to 5.24 billion square feet in 1956.

By 1945, with considerable expansion of the Weed plywood plant production capacity, a marketing program needed to be established. Under Earl H. Houston this responsibility fell to Fay L. Foval, Manager of Factory Sales. Fay was well equipped, having joined Long-Bell in 1923 in the Longview retail yard. With the opening of the mill he transferred to the planing mill and became a grader and inspector for the Pacific Lumber Inspection Bureau, then to the sales department. In 1936 he was moved to the San Francisco district sales office and advanced to District Sales Manager. He returned to Longview in 1944 as Manager of Factory Sales.

His immediate problem, however, was not selling but allocation. Due to the war conditions, all plywood production from all West Coast producers was under direction of the War Production Board offices in Portland, Oregon. This soon changed. Long-Bell adopted the jobber policy for the bulk of its plywood sales.

In 1945 Long-Bell entered manufacturing in the Douglas fir region of Oregon, with the purchase of the Snellstrom Lumber Company. A second purchase was made in 1948 – the Gardiner Lumber Company with mills at Gardiner and Reedsport.

The decision in 1950 to expand its plywood production into Douglas fir was a natural. A feasibility study was initiated by T. E. Heppenstall. This study resulted in Gardiner being selected as the proper site.

A. J. "Cotton" Myers, plywood superintendent at Weed, was assigned the responsibility for building and establishing the plywood plant at Gardiner which he accepted with enthusiasm and vigor. Myers was elevated to the position of Assistant General Manager of the Gardiner operations and before the year 1951 ended the new, thoroughly modern plant at Gardiner was operating. In April, 1953, Myers became General Manager of the Gardiner Division, a position he holds today. Robert Forsythe was the plant's first superintendent. Joe Bennett is the present superintendent.

The Gardiner plant was designed as a 250,000 square foot capacity plant. Today, its capacity is approximately 450,000 square feet daily.

Long-Bell's next plywood production unit was at Longview. In 1929 the M & M Wood Working Company of Portland, Oregon entered into two renewable contracts with the Long-Bell Lumber Co. One was for the plant site, the other was for delivery of logs. M & M then built the plywood plant which started operation in 1930. As one of the renewal dates drew near, Long-Bell determined not to renew the contracts.

After careful investigation, they decided to invest the necessary money to purchase the plant from M & M and to modernize it. The plant was put into production by Long-Bell in September, 1954. Several changes were made in the plant's equipment and flow pattern. The new equipment and other extensive changes were made during operating time.

L. A. "Larry" Lundquist, who had been manager of the Longview Plywood Division of M & M and who was in the employment of Long-Bell at the time they decided to rejuvenate the old plant, was made manager of the operation. Art Carter, also a graduate from the Weed plant, was his superintendent until transferred to Vaughn. Clement Babb took Art's place as superintendent of Longview, a position he retained until it was decided to close the plant in 1959 in favor of a new plant at Chelatchie.

A continuing strong market and an apparent bright future for plywood dictated the next expansion move. This time it was decided to put in a modern plywood plant at the Vaughn operation. J. M. White, Jr., who had served as Assistant General Manager of the Weed Division from March, 1947 until January 1954, was General Manager of the Vaughn Division at the time plywood production started in 1956.

The design and equipment were the last word. A battery of tunnels for steaming the logs was included in the design as Long-Bell had made exhaustive studies which had convinced them that steaming logs improved the quality of the veneers enough to justify the cost. This started a trend by the industry to return to log steaming as a lift to quality production.

Art Carter was transferred from Longview to take over as superintendent, a position he held until he was transferred to Chelatchie in 1960. Clement Babb replaced him. Howard Smith is now plywood superintendent at Vaughn.

Henry Reents started his career at Weed in 1939 and, following A. J. Myers' transfer to Gardiner in 1951, he rose to plywood superintendent. During the period 1954-59 Reents was Assistant to Weed's General Manager John Mantle. In 1959 he succeeded J. M. White, Jr. as General Manager of the Vaughn operation.

Today at Weed . . .



J. M. White, Jr.
Manager.



John T. Dohrn
Plant Superintendent.



Mario Marchi
Plywood Superintendent.

During 1956 the Long-Bell Lumber Company and the International Paper Company announced the merger of the two firms. The Long-Bell operations became the Long-Bell Division of International Paper Company. Eliot H. Jenkins is General Manager of this division. He succeeded Harry G. Kelsey upon his retirement.

In order to use its timber on the southern slope of Mt. St. Helens to best advantage, it was decided to build a modern sawmill and plywood plant "up where the timber was" and phase out the plywood plant at Longview. These new units were put into operation at Chelatchie in 1960.

J. M. White, Jr. was transferred from Vaughn to be General Manager and Art Carter became plywood plant superintendent. M. G. Wooley is the present Manager and Ronald Riggins the plywood plant superintendent.

While Long-Bell was expanding in Washington and Oregon, the Weed plant was not neglected. In 1951 the production of some fir plywood was added to its pine production and in 1958 another expansion and modernization took place, again doubling the plant's size and raising the annual production capacity to 70 million square feet. The latest equipment was installed in a 44,000 square foot addition. This enlargement contained more area than the entire 1911 plant.

J. M. White, Jr. is the present Manager of the Weed branch

(a position his father held for 30 years), having returned to Weed in 1963 after managing the operations at Vaughn and Chelatchie.

Jim Dohrn started at Weed in 1939, and became plywood superintendent in 1954 which position he held until his promotion in October, 1967 to plant superintendent of Weed.

Mario Marchi, the new Weed plywood superintendent, started there in 1930 and has been assistant superintendent since 1954.

In 1961 when the Weed plywood plant was celebrating its 50th anniversary, it was stated, "Our modern Weed plant has kept pace with these advancements and on its 50th anniversary is well prepared to start the next 50 years of making top quality plywood."

Today the Weed plywood plant is one of four thoroughly modern plywood operations with the latest in equipment in the industry operated by International Paper Company on the West Coast. It, along with the company's three other plywood plants at Gardiner, Oregon; Vaughn, Oregon, and Chelatchie, Washington; make I-P's Long-Bell Division a major producer for this country. Their combined daily three-ply production capacity is in excess of 1,400,000 square feet – a far cry from the original 10,000 square feet for Weed back in 1915.

Today at Weed . . .



Plywood in Retrospect. This is the third monograph in the historical series being published by Plywood Pioneers Association. Here, with the story of Weed and Long-Bell, the scene shifts farther south to California, marking the first entry of the plywood industry to that area.

In developing this essay, I owe a debt of gratitude to the officers of International Paper Company without whose general help and assistance this monograph would not have been possible. Specifically I wish to acknowledge the help of Jim Dohrn, Fay Foval, Frank Lewis, Jewell Lowe, Larry Lundquist, "Cotton" Myers, Henry Reents and J. M. White, Jr.

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Additional copies of this publication are available at 25¢ each.

HARRISON CLARK
Secretary
Plywood Pioneers Association
12901 Avenue DuBois, Tacoma, Washington 98498