



Plywood in Retrospect

Ever since 1955 when the plywood industry celebrated the 50th anniversary of west coast plywood production, there has been a growing interest in the history of this still dynamic and fast growing business. In response to that interest, the Plywood Pioneers Association is pleased to present this monograph on the Portland Manufacturing Company which has been called the "cradle of the industry." The story presented here is based on many sources. As the author of this piece I wish to make grateful acknowledgment to J. W. Walby, A. E. Anderson and George Royer who provided fresh background in recent interviews. Other sources included recorded interviews, one with Oscar Mason, in the files of the American Plywood Association. And the wealth of material available in the "The Plywood Age" by Robert Cour continues to be most helpful to those seeking information on those early days. This monograph is the first of a series which the Plywood Pioneers hope one day will cover all the west coast plants that have contributed in an important way to the growth of our industry.

Harreson Clark

Harrison Clark Secretary Plywood Pioneers Association

n 1905 the directors of the Lewis & Clark Exposition in Portland asked the Portland Manufacturing Company to come up with an exhibit featuring something new and unusual. Their answer created the ...

Birth of an Industry

The first plywood panels to be manufactured from western woods, in the western United States, were made in March of 1905 at the Portland Manufacturing Co., St. Johns, Oregon, now a part of Portland.

On May 7, 1901, Gustav A. Carlson, F. S. Doernbecher, and M. L. Holbrook incorporated as the Portland Manufacturing Co. Capital stock was \$25,000 with Carlson holding a half interest and Doernbecher and Holbrook a quarter each. A few weeks later, Portland Manufacturing Co. started producing baskets and crates for the berry and fruit trade, as well as coffee and spice drums and excelsior. Carlson was managing the factory.

On December 2, 1902, Peter Autzen, a Grays Harbor, Washington logging man bought out Doernbecher and Holbrook but remained in Hoquiam and Carlson continued to operate the plant. With Carlson were his superintendent, John Erickson, and N. J. Bailey, a skilled lathe operator who had come to Portland from Michigan in March 1903. Bailey brought with him a considerable knowledge of panel making which he had learned in the east.

His two sons, William C. and Lee, joined their father at Portland Manufacturing Co. in the splint basket department. William (Bill) continued in the West Coast Plywood picture in a prominent way for many years.

Thomas J. Autzen, son of the co-owner, joined the firm in May 1903 on a part-time basis, doing office and clean-up chores.

Early in 1905, Portland was preparing for a World's Fair as a part of the centennial observance of the Lewis and Clark Expedition. It was to be a gala, colorful affair with hundreds of booths and exhibits.

Portland Manufacturing Co. was asked to prepare an exhibit featuring something new and unusual. Carlson and Bailey decided to make "plywood" for the Fair.

In March a panel crew was organized consisting of about six men and supervised by Bailey and Carlson. The plant had a St. Joe lathe. There was no regular press, no prepared glue spreader, no veneer clipper, or sanding machines. An ordinary steam kiln dryer was a part of the plant's regular equipment.

Gluing was a serious problem, the men mixed an animal glue and kept the very odoriferous material warm and pliable over a coal fire; the glue smelled so bad that the men frequently had to seek the comfort of outdoors. Hand brushes were used to "paint" the glue on the veneers. A wooden press was improvised. The pressure was applied by putting ordinary house jacks between a backing timber and another timber fixed to the press. The work was slow and tedious. Only one set of panels could be glued up at one time and this took most of one day. The panels were then put in the press overnight to set.

When the Fair opened in June 1905, young Tom Autzen was placed in charge of showing the panels, the first fir plywood "salesman" of record. He showed the panels to more than a half million persons, including some very interested door manufacturers who recognized the panels as useful to them in their product.

This exhibit thus set the stage for the development and growth of a new west coast industry. Some early customers, all in the Pacific Northwest, included Nicolai Door Co., Oregon Planing Mills, and Central Door and Lumber Co., all in the Portland area. In Washington were Chehalis Fir Door Co., Tacoma Fir Door Co., Pacific Manufacturing Co., Wheeler-Osgood Co., and Robinson Manufacturing Co.

Some orders developed for trunk stock and drawer bottoms. The plant was turning out all panels in the rough and exact sizing was impossible with 1905 equipment. In September 1906, Carlson died and his widow asked Peter Autzen to take over active management of the company. Autzen left Grays Harbor and came to Portland, complying with Mrs. Carlson's request. In 1907 Autzen purchased Gus Carlson's stock from his widow.

Early in 1907 and just prior to purchasing Carlson's stock, Autzen had hired Oscar Mason as superintendent of the panel department. Mason and Autzen became an unbeatable team of plywood experts –

Mason the production man, Autzen the guiding financial and sales genius of the firm. An automatic glue spreader and a sectional hand press were added to the equipment that year, and in 1909 they obtained trimming saws.

At about this time Peter Autzen and Harry Nicolai each put up \$20,000 to finance and start the Nicolai Door Company. In February 1910, the Portland Manufacturing Co. plant burned to the ground, destroying most of the equipment and all of the building. Peter Autzen was reluctant to rebuild but Tom Autzen and Harry Nicolai prevailed upon him to do so.

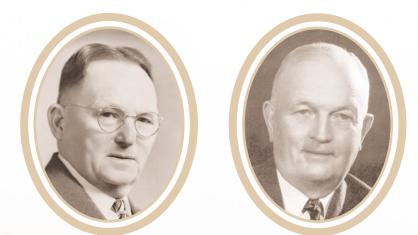
The plant reopened in the fall of 1910 and resumed plywood production again, this time with some improved items of equipment. The next ten years saw many new items of equipment and some changes in process. The logs were steamed to improve quality of veneer. Vegetable glue replaced the blood glue and was applied with mechanical spreaders. Mechanical dryers replaced the steam kiln for drying veneers. Hydraulic presses replaced the old hand house jack type of press. Trim saws and drum sanders became standard equipment.

In June 1918, Peter Autzen was killed in an automobile accident and Thomas J. Autzen assumed full control of Plywood Manufacturing Co. M. C. Boomsluiter was General Superintendent, Oscar Mason superintendent of the plywood department, and Jens (Jack) Lingaas, a fraternity brother of Tom Autzen, was in charge of the log department. Door panels, trunk stock, and furniture drawer bottoms were the principal items of their plywood line, although some experimentation was going on in construction uses such as wall paneling.

A few months after Thomas Autzen took over the controls, Jack Lingaas became sales manager and later general manager in charge of production and sales. He was an energetic go-getter and under his direction the plant expanded into an acknowledged leader in the now fast expanding industry.

In 1924, sales were limited to very few customers. Nicolai Door Manufacturing Co. had first call on all door panel production. Roddis Lumber and Veneer Co. of Kansas City, Missouri was the principal outlet for the lower grades of drawer bottoms, and log-run. Nicolai Door's requirements for door panels were more than Portland Manufacturing could supply, so most of this business went to the Veneer Products Company of Tacoma, which Nicolai took over in 1925. This made it necessary for Portland





The color and romance of the early days of plywood come through clearly in this 1905 photograph of the Portland Manufacturing Company at St. Johns, Ore.

First superintendent of the panel department was Oscar Mason, left. Tom Autzen, right, subsequently assumed leadership of the company. Manufacturing to look for other outlets. Between 1924 and 1928 the industry had doubled its production capacity, and sales competition had become intense. Jack Lingaas went back to Detroit and sold Fisher Body Co., Studebaker, and Seaman Body Co. on using plywood for floor and running boards. This was big volume business. About 50 percent of the production was in door panels, 30 percent in automobile body stock and the balance in miscellaneous uses, mostly to cabinet shops and the panel door jobbers.

Early in 1928 Portland Manufacturing Co., Portland; Elliott Bay Mill Co., Seattle; Walton Veneer Co., Everett; and Washington Veneer Co., Olympia, formed the Pacific Coast Plywood Manufacturers, Inc. (PCPM), a sales company with headquarters in Seattle, Washington, under the direction of Elliott Bay's manager Gus Bartells, to handle total sales effort including sales promotion as well as actual sales for the four separate producers.

This arrangement required that the grade and quality of panel production from each of the four plants be uniform. Tom Autzen prevailed on his superintendent Oscar Mason to assume this responsibility, thus initiating the first effort at uniform industry grading. A. E. Anderson was made superintendent to fill the vacancy resulting from Oscar's transfer to inspection. George Royer was secretary to Mr. Autzen and office manager.

The PCPM proved unsuccessful, however, and following the market crash of 1929, it was dissolved. Portland Manufacturing resumed its individual sales efforts under the guidance of Jack Lingaas. The idea of a joint venture did not die. Thomas Autzen of Portland Manufacturing, Craig Spencer of Elliott Bay, Eslie Walter of Walton Veneer, and Harry Nicolai of Tacoma Veneer decided to try the then somewhat popular merger route. The new company selected the name of Oregon-Washington Plywood Co. Harry Nicolai headed up the merger and sales were placed in charge of Fred Keinzle, sales manager of Nicolai Door Co. Offices were opened in October 1930 in Portland, Oregon.

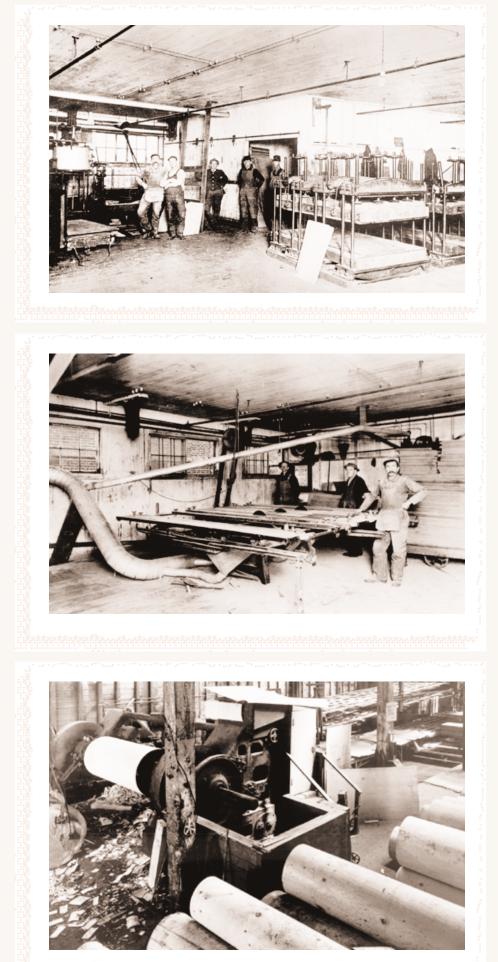
The merger was ill-timed as hard times were on the nation and the great economic depression was fast approaching. This venture lasted just one year and was dissolved in October 1931. Portland Manufacturing Company properties reverted to the sole control of Thomas Autzen. He promptly negotiated a lease with the M and M Wood Working Company to operate the plant on a profit-sharing basis. Jack Lingaas remained as manager and A. E. "Al" Anderson plant superintendent. During the latter part of 1932, Neil Malarkey was made General Manager. The plant was operated as the Plylock Corp. Division of M and M Wood Working Company.

Simpson Timber Company purchased all the M and M holdings in the spring of 1956. Kevin Carty was manager of Plylock for Simpson until the plant was no longer suitable to compete efficiently with the more modern plants. It discontinued production of plywood in September 1963, after nearly sixty years.



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The Forestry Building in Portland, Ore., as it appeared about the time of the Lewis & Clark Exposition when the first plywood panels were displayed. The display was kept intact until the building burned in 1964.



The top two photos show interior of the original plant, which burned in 1910.

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Green-end in the rebuilt plant was highly efficient for those times.



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