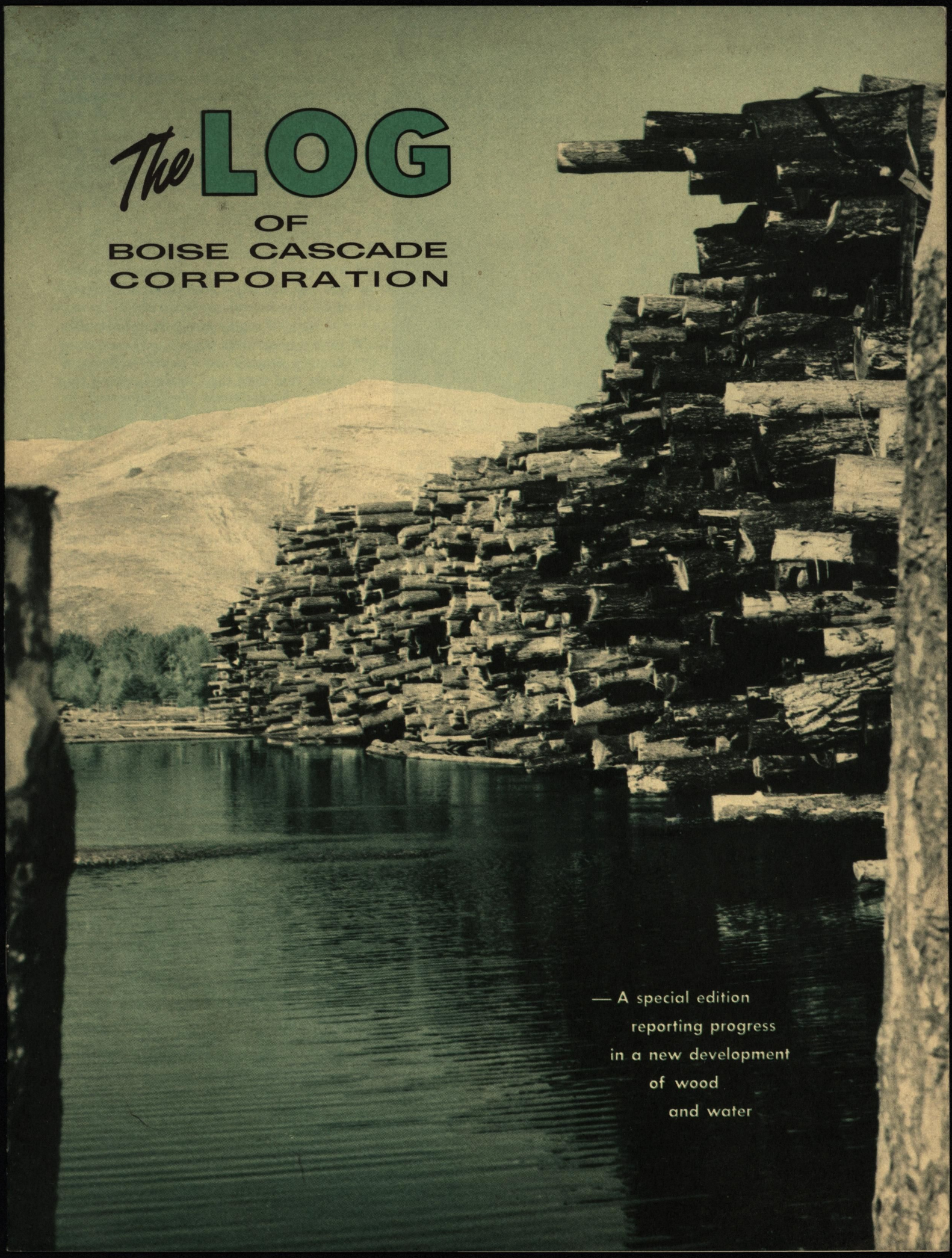
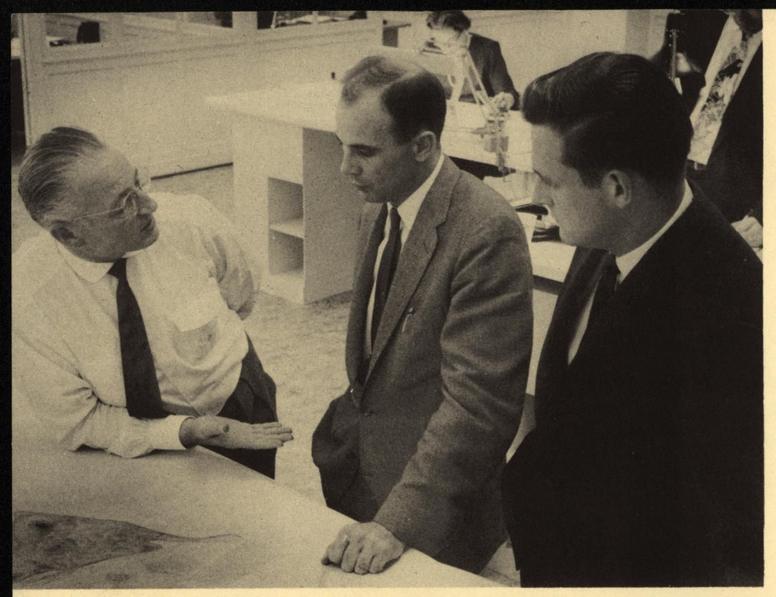
The LOG OF BOISE CASCADE CORPORATION



— A special edition reporting progress in a new development of wood and water



Engineering and design are vital elements in Boise Cascade Corporation's progress at the Attalia, Washington and Burley, Idaho sites. In central engineering office at Walla Walla (from left), W. O. Hisey, director of engineering; R. V. Hansberger, president of Boise Cascade Corporation, and John B. Fery, assistant to the president, discuss plans affecting the Attalia site.

The Intermountain Area Gains a New Pulp, Paper And Container Industry

On October 7, 1957, Boise Cascade Corporation started construction of a new pulp and paper mill and a paperboard shipping container factory at Attalia, Washington. In December we announced plans to construct a second shipping container factory at Burley, Idaho. We take pride in sending you this special edition of Boise Cascade's magazine "The Log" describing our plans for this new industry and the reasoning which lay behind our decisions. We expect to send you further reports on our paper project as we proceed.

One of the great resources of the Intermountain area is the timber which thrives on its many mountain slopes. But in harvesting this timber to make lumber to supply the nation's construction industry, much of this wood material has in the past been wasted. About one third of the standing timber in the Intermountain area is unusable for lumber and has had to be left in the woods where it has constituted a fire hazard and interfered with the reproduction of new crops of trees. And at the sawmills, a third of the harvested tree has been wasted in the process of transforming round logs into square cornered lumber. This has kept the Intermountain waste burners busy night and day disposing of a large part of our timber resources.

For many years it has been the dream of foresters, sawmill operators, sportsmen and government officials to find an economic way to utilize this by-product wood in the Intermountain area. But it was not until Boise Cascade began to expand that a large enough company existed in the Intermountain area to provide the concentration of by-product wood and financial resources needed to support a suitable lumber by-product industry.

Of the various types of by-product plants associated with the forest industry the one best suited to Intermountain waste wood is pulp and paper. In fact, the by-product material from Intermountain lumbering, although unsuitable as lumber, is among the finest material available in the nation for the manufacture of premium quality packaging paper. However, the economic manufacture of paper requires large investments and tremendous quantities of raw material.

Boise Cascade started its growth with an expansion of its lumbering operations at Emmett, Council and Cascade in Southern Idaho. And then, the Cascade Lumber Company in South-Central Washington with its huge timber resources and four sawmills at Yakima, Natches, Ellensberg and Goldendale was acquired by Boise Cascade. These expansions provided a foundation large enough to support an Intermountain paper industry.

Our pulp and paper mill will be owned and operated by Cascade Kraft Corporation, a wholly-owned subsidiary of Boise Cascade. The mill will consume 15 heaping railroad carloads of wood chips each day of the week and produce 150 tons of finished packaging paper each day.

Our mill will "cook" waste wood into paper pulp by a chemical method known at the "kraft process." Kraft is a German word signifying strength and the kraft process is especially suited to Intermountain type wood and to the making of high strength packaging paper.

Announcement of Boise Cascade Corporation's plans for the Attalia site was made at a dinner at Walla Walla, attended by civic and government leaders. Officers of the corporation attending included (from left), President R. V. Hansberger; J. D. Bronson, president of the Cascade Lumber Company; S. B. Moser, vice president and treasurer of Cascade Lumber Company; and George V. Hjort, vice president of Boise Cascade Corporation.

Cascade Kraft will start production early in 1959. Most of the machinery is already on order. The heart of the pulping process, the chemical recovery boiler, has been purchased from the Babcock and Wilcox Company and will be erected by the C. C. Moore Company. This furnace, eight stories high, will recover the used cooking chemicals for re-use and produce the steam necessary for cooking wood into pulp.

The heart of the paper making process is the paper machine. Our machine is now being made by the Black-Clawson Company in Watertown, New York. This machine in a Fourdrinier type machine which forms paper on a high speed endless wire screen, presses it, dries it and rolls up the finished rolls all in one continuous operation. This machine is 18 feet wide, 300 feet long, and weighs 800 tons. It will make enough paper each day to pave the highway from Walla Walla to Yakima and then on up to Ellensburg (about 170 miles) with a ribbon of paper 12 feet wide.

But we're not planning to pave highways with our paper. Our paper will be used to make shipping containers and paper bags to package food products and industrial products. Customers will be manufacturers of paper and paperboard packages located in the Western United States. And we will be one of these customers ourselves at Attalia, and Burley.

Through another wholly-owned subsidiary of Boise Cascade, Cascade Container Corporation, we plan to make corrugated shipping containers to package Intermountain products. Cascade Container will start operations at Attalia during the first part of 1958, actually a year ahead of our paper mill. It takes that much longer to build a paper mill. During this year, raw material will be provided to Cascade Container from other paper mills.

All of the machinery for Cascade Container at Attalia has been purchased. Included in this machinery is one of the most modern corrugators ever built, a machine 7 feet wide and 267 feet long, which takes three layers of paper and in one continuous operation forms them into scored blanks of flat corrugated paperboard ready to be printed, folded and glued.

Ground breaking for the Attalia site on the east bank of the Columbia River signaled formal start of a construction project now in rapid growth. From left, Harley Allen, Walla Walla Port Commission attorney; E. R. Lovell, Port District Commissioner; William Ray, Chairman of the Port Commission; W. O. Hisey, Director of Boise Cascade Central Engineering Division; John B. Fery, assistant to the corporation's President; Mickey Cochrane, superintendent of construction for the Hoffman Construction Company and William F. Farley, General Plant Manager of Cascade Container plants.

We feel that the shipping containers of tomorrow will find increasing use as advertising surfaces for the products they contain. So we have purchased two printing machines designed especially for us to print attractive designs on our containers in multiple colors. And we have purchased the most modern high speed automatic folding and gluing equipment to complete the fabrication of our containers.

This machinery has been selected to permit a flexible and rapid flow of containers through our plant. We have done this because we have noted that in the Intermountain area rapid service to container users is becoming increasingly important. And being located within the Intermountain area at Attalia and Burley and with our own paper supply, we should be especially well prepared to provide fast service to our container customers.

On the Shore of the Mighty Columbia

The Attalia Site Concentrates Water, Power, and Transport

Attalia (pronounced—a tail' ya) is located on the McNary pool of the Columbia River about 15 miles South of the Tri-Cities of Pasco, Kennewick and Richland, and 32 miles West of Walla Walla. The Attalia location was selected after months of analysis of many factors.

Attalia is located near the center of Boise Cascade's group of seven sawmills which will supply much of the needed waste wood raw material. It is also located near many other sawmills from which we expect to purchase by-product wood material.

Attalia is located on two major rail systems, the Northern Pacific and the Union Pacific. This ready access to rail service will be important in the shipment of inbound raw material and also in the shipment of outbound paper and shipping containers.

Attalia is also located on a major highway (No. 410), which will facilitate truck shipments both in and out of our factories and provide ready transportation to our employees.

A paper mill uses great quantities of water in the forming of paper and Attalia is located on the great Columbia River, an endless source of water for our papermaking process. And the Columbia also offers barge transportation for both inbound and outbound materials. The power dams along the Columbia will provide our two factories with dependable electric power.

We have also noted that because of ample land, favorable climate, and available irrigation water, Attalia is in the heart of a vital food producing area of the Intermountain area. Apples from Central Washington, peas from Eastern Washington and Northeastern Oregon and fruit and potatoes from Idaho are shipped throughout the country. These and other food products from the area are being packaged, in rapidly increasing proportions, in paperboard containers. And between Central Washington and Salt Lake City there were no facilities for producing paperboard shipping containers.

Graphic portrayal shows significance of Attalia site, viewed in relation to the Northwest and Intermountain country. Addition of the Burley site in southeastern Idaho increases Cascade Container's coverage. Arrows denote inbound supply flow, outbound production.

Because of the great resources of land, timber, and water, we foresee a great future for the Intermountain area. As the nation's population expands, this area will be called upon to an even greater degree to provide food products, contruction materials and industrial products to national markets. We are keeping this future for our area very much in mind in our designs. In every phase of our engineering we are providing for future expansion so that as the need develops, our mill and container operations can grow to keep up with the inevitable expansion of the Intermountain area.

Our new industry, as you can see, is truly an Intermountain industry. Waste wood from Intermountain timber and sawmills will be shipped to a centrally located Intermountain pulp and paper mill. From the paper mill the paper will go to Intermountain container plants. And the finished containers will be supplied to producers of food and industrial products originating in the Intermountain region surrounding Attalia and Burley.

The Land, the Wood, and the Water

Another vital resource of the Intermountain area is its plentiful supply of water. Very few regions in the country can claim water resources to equal those of the Intermountain area. Water provides irrigation to the area's fertile, but otherwise arid land, which produces food products for national consumption. It provides electric power for homes and industry. It provides recreation for the growing population of the Northwest. And it provides process water for paper making. Without plentiful water the Intermountain area would be a barren desert area instead of an expanding producer of food and industrial products.

And without timber there would be little water. The great mountains of the Intermountain country reach up to condense moisture from higher elevations, which falls as rain and snow on the mountain slopes. And there grow the vast Intermountain forests. Without these forests the water would soon run down to the sea leaving the area barren and dry. But the forest with its root system holds the moisture like a great sponge and feeds it gradually into the mountain streams and springs keeping them running through the dry season.

The production of paper is dependent upon the Intermountain area's water, not only because of the forests which the water provides, but the very production of paper requires great quantities of water to form paper fibre on the paper machine. Furthermore, the marketing of paper in the Intermountain area depends upon water, because without water for irrigation there would be little produce for paper to package.

But, in turn, the production of paper helps to conserve our water resource, because it creates a sound economic base for better forest management. The production of paper by Cascade Kraft will require no addition to the cut of Intermountain timber since our paper will be made from by-product wood from the present cut.

Moreover, the values created for waste wood by our paper mill will make it feasible to bring in much of the dead and defective wood which now is left in the woods to frustrate the growth of vigorous new crops of trees.

So paper making is not only dependent upon the wood and water cycle of the Intermountain country, but it contributes to it through improved forest management.

We are, therefore, keenly aware of the importance of water in our area. Extreme care is being used in our design and equipment selections to eliminate any possibility of polluting or contaminating the Columbia River with our paper making process. Although large quantities of water are needed to make paper, the water is not consumed but is returned to the river. Our engineers have designed methods of filtering this water after it has been used for paper making and much of it will be re-used many times in our process. The water which will be returned to the river will be processed to remove harmful materials which might be injurious to fish life.

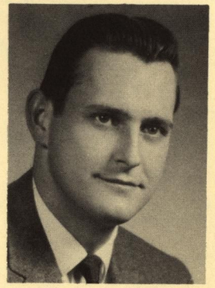
And most important of all, the kraft process we have selected for pulping our waste wood permits recovery and re-use of our cooking chemicals so that they are not dumped into the river. This was not possible in old-fashioned paper making processes, but in our modern kraft process a recovery boiler system is used to concentrate and burn used cooking liquors which are then used over and over instead of being dumped into our vital water resource.

These and many other safeguards are being incorporated in our design to insure that the industrial, agricultural and recreational values of the water resources upon which our pulp and paper industry is so dependent are not impaired.

We are proud of our paper program, our design, our modern machinery and our progress. But we are most proud of our new paper organization. And we think that our personnel is the most important part of our paper project. We have tried to select the very best qualified people we could find and we think we have succeeded. They represent many years of progressive experience in their fields. Here are a few of the key members of our new paper organization.

W. O. Hisey

W. O. Hisey, Director of Central Engineering Division of Boise Cascade. Former Vice President of Western Kraft. Graduated from Willamette University, and was professor of pulp and paper technology at New York State College of Forestry. Designed and constructed two pulp and paper mills in South Africa. Vice President and Chief of foreign operations for Sandy Hill Iron and Brass.

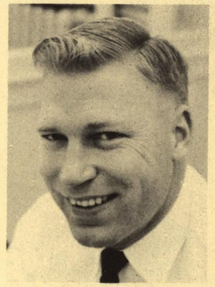


John B. Fery

John B. Fery, Assistant to President Hansberger of Boise Cascade. Was Production Manager at Western Kraft Corporation, has a bachelor's degree in Business Administration from University of Washington, and Master's in Business Administration from Stanford.

Hugo Trygg

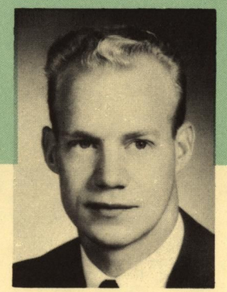
Hugo Trygg, Mill Manager of Cascade Kraft. Has had experience in paper leading from Mobile, Alabama to Albany, Oregon. Has been with International Paper, Longview Fibre, St. Regis, Marathon, Weyerhaeuser and Western Kraft, positions ranging from laboratory foreman to General Superintendent.



William F. Farley

William F. Farley, General Plant Manager of Cascade Container's Attalia and Burley plants. Engineering and Business degree, University of California, and recently plant superintendent for Container Corporation of America at Emeryville, California. Formerly operations manager for Zellerbach Paper Company, San Francisco and for Crown Zellerbach Corporation at Camas, Washington.

A Few of the People You Will Meet At Cascade Kraft and Cascade Container



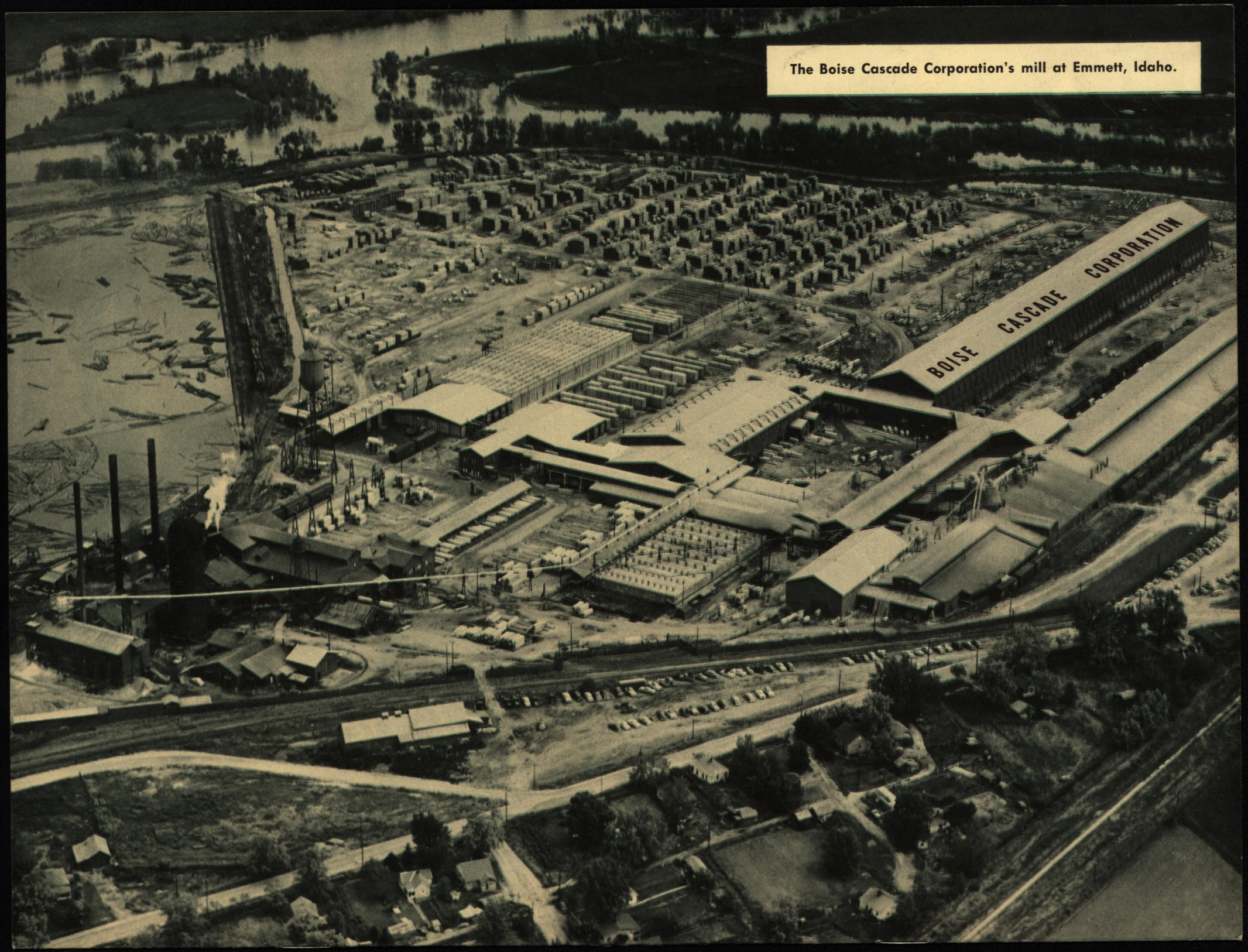
Fred P. Thompson, Jr.

Fred P. Thompson, Jr., General Sales Manager of Cascade Container plants at Attalia and Burley. Graduate of University of Oregon in Business Administration, and formerly with the Longview Fibre Company, as manager of sales for Eastern Washington, Eastern Oregon and Idaho.

M. Keith Miller

M. Keith Miller, Chief Engineer of Paper Division of Boise Cascade Corporation's Central Engineering Division. Graduated from William and Mary, Williamsburg, Pennslyvania, Portland State College, Portland, Oregon and Oregon State College at Corvallis. Was project engineer for The Weyerhaeuser Timber Company pulp division at Springfield, Oregon, and Plant Engineer for Western Kraft at Albany.

There are others in our growing family. These are just some of the people you will meet at Cascade Kraft and Cascade Container. All of them will be glad to work with you.



The Boise Cascade Corporation's mill at Emmett, Idaho.