

Powell River

DIGESTER



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Powell River
DIGESTER

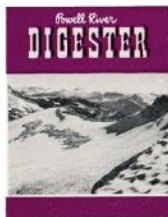
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POWELL RIVER COMPANY LTD.

Standard Building
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Editor
J. A. Lundie

Staff Photographer
O. J. Stevenson

Through the pages of this journal we hope to tell our readers about Powell River and its products.



The Cover Picture

Powell Lake, extending from the heart of Powell River a distance of 30 miles inland, is a source of one-half of the "white gold" that turns the giant turbines of our plant.

Fringing the lake borders are the great snow-capped peaks and snow-filled valleys, whose melting crops swell the lake levels and supply over 50,000 horsepower to drive the wheels of industry at Powell River.

This month's cover picture, by Ossie Stevenson, shows our "white gold" in its native hills, awaiting the warm days of spring and summer to send it rushing down the slopes to join its predecessors in the production of Powell River newsprint and pulp.

OUR FIRST VICE-PRESIDENT



R. Bell-Irving

Last year a new member was inducted into Powell River Company's Twenty-Five Year Club. The new member was Robin Bell-Irving, first Vice-President and consultant to the President, who had just completed a quarter of a century as an employee of the Company.

Mr. Bell-Irving came to us as assistant resident engineer at Powell River, on June 27, 1920. In October, 1920, he was promoted to Resident Engineer.

His term as resident engineer was an historic one. Between 1923-1926, Powell River doubled its newsprint capacity. New machines were installed. New buildings were erected, and a major electric power development initiated at Lois River. They were strenuous, nerve-wracking, sleepless-night times; and the new resident engineer was in the thick of the fray, planning and supervising this tremendous construction cycle.

In 1926 he succeeded Mr. A. E. McMaster as Resident Manager. During his regime as Resident Manager, No. 7

newsprint machine was installed, and the first 25,000 h.p. unit at Lois River completed.

Mr. Bell-Irving left Powell River in 1932 to take over the post of Assistant General Manager, with headquarters at Vancouver. In 1937 he was appointed a Vice-President, and on July 3, 1944, was made first Vice-President of the Company.

Over twenty-five years, "Robin", as he is known to everyone in Powell River, has been closely identified with the policy, progress and development of the Company. He has played a leading role in the mechanical and technical branches, and is an authority on paper mill engineering and construction.

Robin is a veteran of the first World War. He served overseas for four years with R.A.F. and R.C.A.F. After the war he married Miss Katie Watson, daughter of the late Harry Watson, a pioneer British Columbia business leader. They have four sons, Peter, Robin, Brian and Harry.

They Dropped In To See Us



Jenkin Lloyd Jones, editor of *Tulsa Tribune*, another member of the Oklahoma Jones's, was the third member of the clan to visit us during the past year.

"Jenk" had all the dynamic qualities of the family—and while here spoke at one of the company's regular monthly supervisors' dinners. As a raconteur and orator, he upheld the family prestige—and that is high praise.

He also shared in the capture of a fish—but that is another story.

Another interesting visitor, looking us over for the first time, was Mr. Norman Chappell, director of pulp and paper section of Department of Trade and Commerce, Ottawa—who was making a survey of the pulp and paper industry on the Pacific Coast.

Mr. Chappell renewed an old acquaintanceship with Resident Engineer Harold Moorhead—and was highly impressed with the efficiency and general lay-out of our plant.



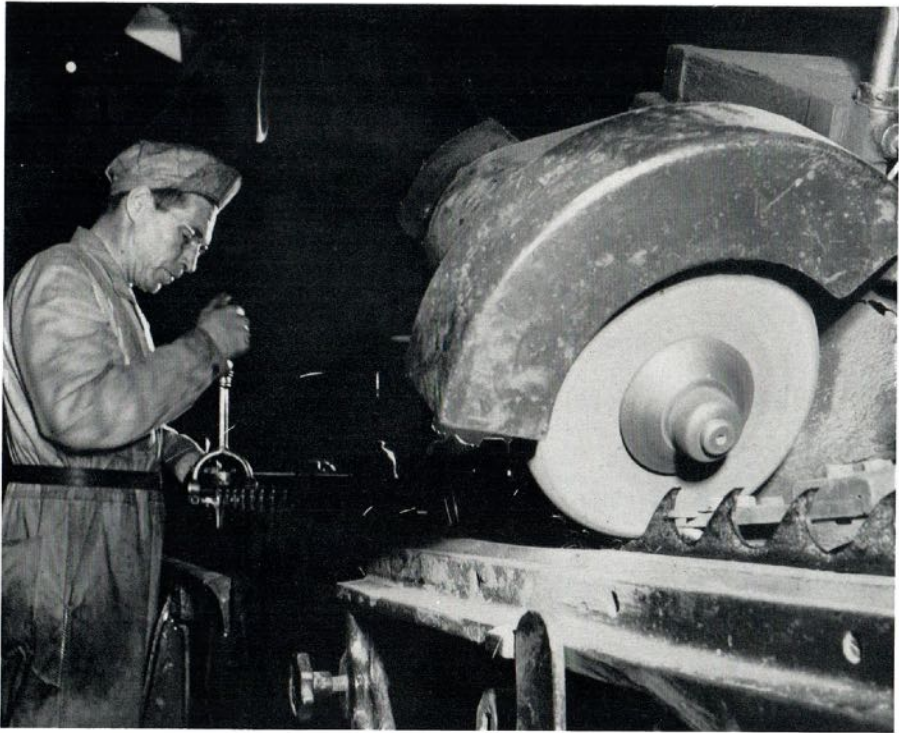
Mr. Gordon M. Dallyn, M.C., B.Sc.F., executive secretary and editor of the *Canadian Geographical Society*, paid us a brief visit recently.

Mr. Dallyn was on an extended survey tour of various industries in Canada, canvassing the possibilities for further educational articles in the *Canadian Geographical*. He expressed the opinion that the welfare and industrial background of Powell River would be of widespread interest to Canadian readers.

An old friend in the person of Mr. Frank G. Huntress, Sr., publisher of the *San Antonio Express*, San Antonio, Texas, was out to Vancouver on a flying visit recently.

Mr. Huntress is one of the best known citizens of San Antonio—and his paper enjoys widespread

prestige in the state. His civic achievements and his efforts for the welfare of his state and city have been commemorated in a plaque presented by his employees and now set in the lobby of the Express Building.



John Calder, saw filer, at work.

THE SAW DOCTOR

By **GORDON THORBURN**
Head Filer

His official title is Saw Filer. I also like to think of him as a Saw Doctor. True, saw filing suggests to the layman a picture of a man laboriously filing away by hand. But Saw Filing in a pulp and paper mill is far divorced from this conception.

The saw filing staff are among the unsung stalwarts who keep our newsprint moving. If anything goes wrong with a saw, if a breakdown occurs, if it is not honed to razor-edge keenness, production and efficiency suffer.

Some conception of the importance of the saw filer in paper making may be realized when we find that the big band saws must be sharpened, in some cases, every two hours, in others every four. The Powell River sawmill, masticating well over half a million feet of logs daily, must have a good panel of doctors to maintain the health of its patients.

Band Saws, Circular Saws, Edger Saws, Re-saws and dozens more of all kinds are his daily clients. They all have their ailments and the saw doctor is the practising physician who effects a cure or patches up the patient.

Let's take a 60 ft. band saw, 16" wide. How are they joined? Simply by butt welding, which means placing the two ends flush and welding them together. To the uninitiated, it is scarcely credible that they could withstand, day after day, the 18,000-lb. strain to which they are subjected.

We are saw dentists. We weld in new teeth which occasionally are knocked out by spikes or rocks which sometimes are embedded in the logs. Cracks, too, are welded and the saw, returned to service, finds his new teeth are as good as his old set.

In the old days all filing was done by hand, but today automatic precision grinders do the job in a fraction of the time and with equal efficiency.

We saw filers, saw doctors, or saw dentists, whatever you want to call us, are a small group of tradesmen, known to few, but vital to the saw mill and to the daily production of Powell River newsprint.

Our filers are among the best and most experienced "Saw Doctors" in the sawmilling industry.

THE HYDRAULIC BARKER

By Harold Moorhead, Resident Engineer

The familiar view of the mill from the log pond has been greatly changed during the past year. The sawmill with its log haul, which previously dominated the scene, is now partially obscured behind a large, new concrete building from which two steel log hauls project. A third log haul will soon be added.

When the new plant goes into operation, the old wood room will be taken out of service. This building, which has housed wood preparing equipment ever since the mill was built, will be converted into a central mill supply store.

Another old landmark, the wooden conveyor structure across the foot of Second Street, will be demolished.



Harold Moorhead

The main pieces of equipment to be housed in the new plant are the large log hydraulic barker, the small log hydraulic barker, and the whole log chipper. The large barker, patterned after the one installed at the Longview plant of the Weyerhaeuser Timber Company, can handle logs up to 6 feet

in diameter and 26 feet in length. Water pressure at 1250 lbs. per square inch is used to strip the bark from the logs. As a further step in a policy inaugurated several years ago by this Company, the small log hydraulic barker is being installed primarily to handle the smaller timber from logging operations. This barker will handle logs ranging from 5 inches to 16 inches in diameter. The whole log chipper will handle logs 26 feet in length and up to 26 inches in diameter. A log of this size can be converted into chips in 25 seconds.

The main units will occupy only a very small portion of the space inside the building. The necessary facilities for conveying, storing and sorting logs as they are routed through the new plant require much space and equipment. Provision has been made whereby logs of different species can be barked, and then conveyed to the chipper, sawmill,

or returned to the log pond for storage. Concurrently, logs which have been barked previously can be taken from the log pond and sent to either the chipper or the sawmill.

MODIFICATIONS

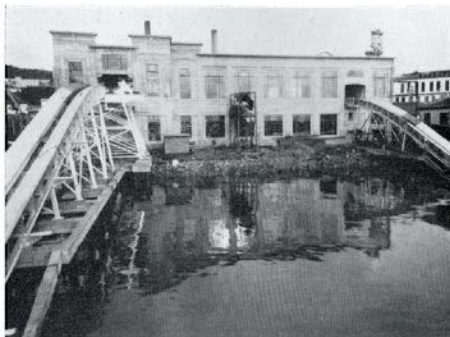
Extensive modifications have to be made in the sawmill to adapt it to the handling of shorter logs. An addition is also being constructed along the west side of this building to house chip screens and two automatic block loaders. Under this new system, all blocks for making ground wood pulp will be loaded on skips at the sawmill and then transported to the grinder rooms by means of straddle trucks.

STEEL CONVEYOR

By far the most spectacular structure to be erected will be the steel conveyor trestle which will carry chips from the sawmill to the top of the digester house. This structure will run high above the roof of the old wood room and will vie with the smokestacks as the main landmark of the town.

Material deliveries have been disappointing throughout the progress of the work. The list of shortages is now rapidly diminishing and present plans call for the entire plant being in operation early in 1947.

As a result of this installation it is anticipated that a wood saving of approximately 10 per cent will be made.



Exterior of Barker Plant, showing log conveyors.

Powell River Sales Corporation

Now Active



*Anson Brooks,
President*

The Powell River Sales Company Ltd. announces the purchase of G. F. Steele & Co. Incorporated, an American corporation with which it has long been associated. The name of this company has been changed to Powell River Sales Corporation.

The Corporation, headed by Anson Brooks, will have its main office in the Skinner Building, Seattle, and Mr. Brooks will make his headquarters there. The Los Angeles office, headed by Mr. F. R. Ward, will be in the Security Title Insurance Building, and the San Francisco office, located in the Russ Building, will be in charge of Mr. Donald L. Jeffries. The Manhattan office will be at the former Steele & Company address, 400 Madison Avenue, headed by V. R. Coudert and E. E. Barrett.

The reason for this move is that Powell River Sales Co. desires to create a more direct connection between itself and the consumers of its newsprint and pulp.

The corporation will perform all the functions for Powell River Sales Co. heretofore carried out not only by G. F. Steele & Co. Incorporated, but by Newsprint Service Co., Bulkley, Dunton Pulp Co. Inc., the La Boiteaux Co., and Blake, Moffitt & Towne.

The corporation is presently active in all markets. Blake, Moffitt & Towne, which has been actively and efficiently associated with Powell River products will carry out their outstanding contracts, all of which expire December 31, 1947, but will continue to purchase Powell River newsprint and act as warehouse jobbers of Powell River newsprint on the Pacific Coast.

Harold S. Foley, President, and William Barclay, Vice-President of Powell River Sales Company, will be on the Board of Directors of the Corporation.



*Victor R. Coudert,
New York*



*Donald L. Jeffries,
San Francisco*



*Edmund E. Barrett,
New York*



*Fred R. Ward
Los Angeles*

This article was published in "Editor and Publisher".

Some Impressions of Sweden and Finland

By HARRY ANDREWS, *Technical Director*

Two Wars Have Left Finland Reeling and Still Dazed
But in Sweden the Picture is Brighter

The particular objectives of our recent trip to Sweden and Finland were to assess what the Scandinavian industry had accomplished in new processes, equipment and ideas, what diversification of products existed—and how small logs were handled and barked.



H. Andrews

The war years were naturally a complete blank; and we were anxious to discover if our own research and development departments were abreast or ahead of "pulp and paper thinking" in Northern Europe.

Looking at the overall picture we were gratified to learn that we were well "up front" in technical and operating improvements; that the Pulp and Paper Industry of Canada was providing a service to the industry and

to its customers unsurpassed anywhere in the world.

The Pulp industry in Sweden was operating at 65% of mill capacity. Shortage of coal was an initial reason for low production. Further curtailing factors were shortage of logs and the difficulty of obtaining men for woods operations.

Wood problems were vexatious. In prewar years pulpwood and sawmill capacities balanced production; but during the war, considerable pulpwood was and still is being used for fuel and some forests were considerably overcut. Full capacity is not anticipated for some years.

Pulp manufacturing costs are high. Coal is \$22.00 per ton, pulpwood landed at the mill averages \$22.00 per cord against \$6.50 prewar cost. Salt cake, used in Kraft, is high. Wages have doubled over the war years. In the case of bleached Kraft, we were informed that the \$18.00 upcharge allowed by O.P.A. in the United States, would not cover the bleaching cost of sulphate in Sweden.

Labour, while apparently reasonably content, seems to have declined somewhat in efficiency. All mills are unionized and a master agreement is drawn up for the entire industry. Base rates, plus bonus, which are a part of the rate structure, are about 45 cents per hour for a 48-hour

week; i.e., \$90.00 per month, with the average workman earning around \$110 monthly. Food, clothing, etc., appeared higher than in Canada, but income tax, particularly in the lower brackets, was very moderate.

Research and development, despite these difficulties are being pushed vigorously; and the Swedish industry, erected on an essentially sound foundation, is moving ahead.

Finland's pulp and paper industry, hamstrung by Russian reparation demands, by labor difficulties and shortages, by fuel and material shortages, by the aggravated problem of rehabilitating thousands of dispossessed people from the Karelian Isthmus, is in a depressed condition. Finland resembles a country emerging rather dazed and still groggy, from the morass of a profound depression. No major development has taken place. Only few construction projects have been initiated. Deliveries, throttled by exchange difficulties and shortages, are slow. But the situation is improving, although Finland, tied in with Russia to a far greater degree than in 1938, will have less pulp to export to the Western world.

The industry was operating at about 35% capacity, because of coal and oil shortages, aggravated by labor difficulties, and scarcity of raw materials. Manufacturing costs are high. Wages have practically trebled; pulpwood, delivered at the mill, costs \$10.00 per ton more than in 1939.

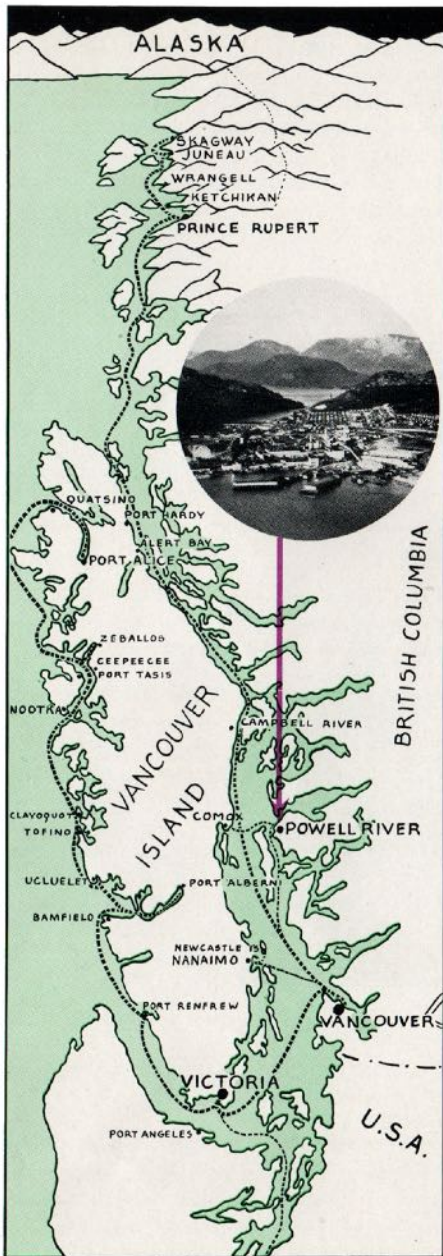
Briefly summarizing the situation, I would say that Canadian mills are well in the forefront of planning and "Know-how", that our research men are "on their toes", that our costs and operating efficiency will stand comparison with the best—and that the quality of our product is being maintained at a high level.

Among the ardent feminists arrested during a suffragette demonstration in London was an elderly crusader, often in jail for the cause, and a young girl, sentenced for the first time.

They were assigned to adjoining cells. Very soon the older woman heard her younger companion sobbing.

She rapped energetically on the dividing wall, and called out:

"There, there, my dear, don't cry! Put your trust in God—she will protect you!"



Where is Powell River?

The map was prepared for the benefit of our many friends who have not been to Powell River—and who are uncertain of our exact location on the Pacific Coast.

A glance at the map shows that we are protected from Pacific storms by the intervening broad back of Vancouver Island.

Another glance—and the reader will observe that direct shipment can be made by vessel from Powell River to any seaboard location in the world.

Located about eighty miles from Vancouver, Powell River is close to the eastward rail facilities and the Pacific shipping lanes.

Powell River is in the temperate zone—and is open all the year round. Freezing water is unknown—and zero weather is something residents experience only in books.

Maximum temperature in the summer seldom ranges above 82°—with 75-77° being a fair average.

In the winter, temperature seldom drops to 20° F. Snow that stays on the ground for more than a few days is a rarity—and local ice enthusiasts have been fortunate if the lakes in the district are frozen over for more than two or three days. Average winter temperature runs between 40-45°.

The harbor can accommodate the largest freighters and berthing facilities for three ocean-going vessels are available at one time.

Our own Marine Transportation

Sea Power! Control of the Seven Seas, the ability to move their merchant fleets uninterrupted along the ocean highways has been the backbone of Anglo-Saxon prosperity in the world.

Sea Power, too, is the basis on which much of the prosperity of the Pacific Coast pulp and paper industry is founded. Sea Power is one of the keys that have opened the doors to the development and expansion of Powell River. Without Sea Power the great stands of B. C. soft-wood timber could not have been transported to Powell River. Without Sea Power our paper would never reach our customers. Without Sea Power scores of jobs, essential in a coast located mill, would be impossible.

Sea Power at Powell River centres largely around the Kingcome Navigation Company, a wholly owned subsidiary of the Powell River Company Limited.

The Company was incorporated with a capital stock of \$10,000 in 1910 for the purpose of serving a new logging operation situated at the head of Kingcome Inlet, B. C.—an operation that was carried on until 1925. The Kingcome Navigation Company derives its name from Kingcome Inlet, a famous logging area along the B. C. coast.

The Company operated in a small way with boats and scows for the Powell River Company until 1913. Then the capital stock was increased to \$200,000 and the Company purchased the tug *Ivanhoe*, tug *Reliance*, tug *Union*, scows No. 1 and No. 2 and the camp boat *Babo*.

During 1916 the tug *Farquhar*, four barges and the hull of the steamer *Kingcoe* were acquired. In 1917 the Company built scow *KN 5*, and purchased the tugs

Progressive and *Chemainus*. *KN 5* was the first scow used in the movement of paper from Powell River to Vancouver and Seattle. The tug *Farquhar* towed the scows while the *Ivanhoe* and *Chemainus* were towing logs. The tug *St. Faith* (now called the *S. D. Brooks*) was added to the fleet in 1926 and is one of the largest tugs on the coast. She was obtained from the British Admiralty. The tug *Glenholme*, purchased in 1946, has since been renamed the *Scanlon* in honor of M. J. Scanlon, a founder of the Powell River Company.

The tug *Farquhar* was sold in 1928. The tug *Chemainus* was later disposed of.

The present equipment of the Kingcome Navigation Co. consists of the tugs *S. D. Brooks*, *Ivanhoe*, *Progressive* and *Scanlon*, six covered barges and three flat scows.



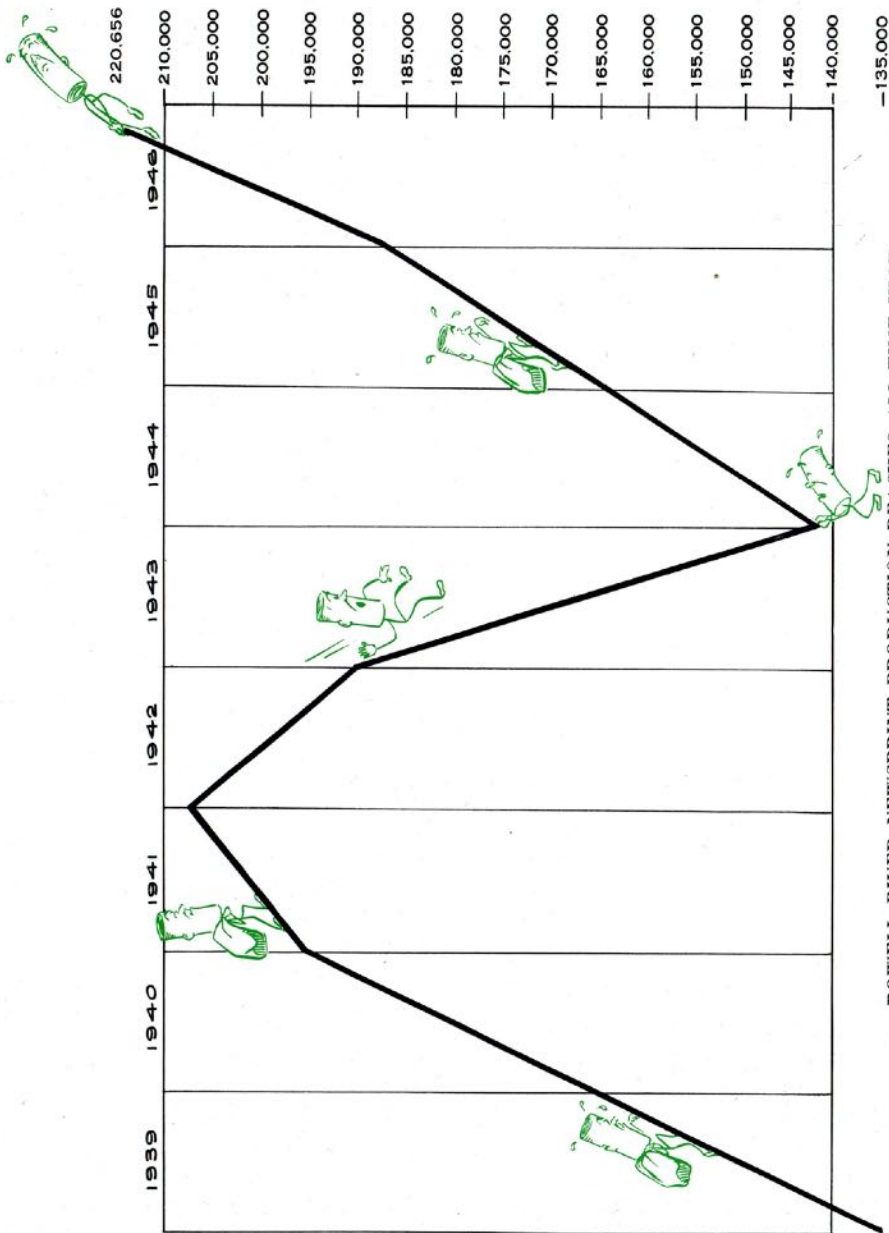
A. W. DeLand
President



F. L. Kurtz
Manager

With this transportation fleet, the Powell River Company is in a unique position to guarantee uninterrupted deliveries of its products. Our ability to stand on our own transportation fleet was a tremendous asset during the war years, when all the gold of Cathay could not purchase shipping space. It is still one of the main reasons why deliveries to customers, so far as Powell River responsibility is concerned, have been maintained regularly and on schedule.

The "Kingcome", as a partner in the production of our products, are specialists in paper handling and paper shipping. Their paper-carrying barges are designed for the special comfort of the newsprint roll or the pulp bale—protection of the product is their aim and their duty.



POWELL RIVER NEWSPRINT PRODUCTION REACHES ALL-TIME HIGH



The Editor takes the Purple Band Route

By J. A. LUNDIE

I saw the Purple Band of Powell River newsprint in the great, prosperous oil center of Tulsa, Oklahoma. I saw it in the huge, sprawling "sovereign state" of Texas—in Dallas, in Fort Worth, in Houston, in San Antonio. I swung westward across the vast cattle ranges and deserts of Arizona, and saw it again in fascinating Phoenix. And I crossed into sunny California, to follow the same trail through Los Angeles, Hollywood, and California.

I had still only touched the fringes. I had taken no branch lines, of which there are dozens; and had missed many famous Powell River stations on the main line. But I saw enough to appreciate more than ever before what Powell River means to scores of large, well-established cities in the United States; to experience a glow of pride and gratification over the genuinely high regard in which our product is held in the pressrooms of the Southwest and West Coast.

And I felt the impact of the mutual problems which face manufacturer and consumer in these days when the temporarily overcrowded cities of Texas, Oklahoma and California are literally bursting at the seams when material shortages and delays plague seller and buyer equally, when products are cramming on every source of production, and yet lag far behind demand; when newspaper publishers sink down side streets to elude persistent advertisers; or blench every time a phone ring, fearful lest a potential subscriber is on the wire.

The situation is reminiscent of the Civil War days, when the inflated greenbacks were still legal tender—and creditors hurled themselves out of back windows to avoid debtors, knocking at their door, but huddling with depreciated currency.

But, Allah be praised, I was not a salesman, although some of our good friends strive valiantly to promote me (temporarily) to that towering pinnacle. For me, it was an educational and fact-finding tour. I was the parched traveler, thirsting for information, eagerly grasping at news horizons, avidly drinking in all I could of the richness, history, vitality, progressiveness and color of these Southwestern States.

One impression, among hundreds, stands out in high relief. It is an merchandise impression of the fine, hospitable, and generous-minded folk who work and play along the Purple Band route. An editor, it was my privilege to meet them, and to profit by their matured opinions on the "state of the nation", to hear something of their future plans, the role they play and the molding influence they exert in the civic, state and national life of their country.

As a dabbler in history, I was personally privileged to encounter men who, in themselves, had made signal contributions to the history and development of their own state; who are acknowledged authorities on those flaming days when the Southwest fought all corners, and when the spirit and traditions that are today so much a part of the Southwest, were being forged.

Such a man is Mr. R. L. Jones, Sr., of Tulsa, whose career in the publishing world included editorships of *Californian* and *Consolidator*, and who knows the history of Oklahoma as few men know it. Such men as Mr. Ted Dealey, Jim Moroney and Myer Dronsky of the Dallas News, who, all their lives, have been Dallas and Texas crusaders; who can tell vividly and in minute detail the complete story of Texas under six flags; and who will remind you that Texas was still fighting after the rest of the Confederacy had accepted Grant's armistice conditions. Over in Fort Worth, Bert Hones and his associates of the *Star Telegram* may deny the exclusive civic virtues of Dallas, but will defend with their last lengths their ultimatum that Texas is still in the United States, but only if the United States behaves itself in the manner to which Texans are accustomed. Then down to the crumpled, expanding port of Houston, where much of the history and growth of Texas is to be found in the origin and development of the Houston Chronicle. Here, too, the epic and colorful struggle for Texas independence, the genesis of business San Houston and his sulking Texans, the outwitting of Santa Anna and the end of Spanish sovereignty over the Lone Star State, are as well known to Mr. Jake Butler and his business manager, Lee Mims, as the paper-making process is to the average Powell Riverite.

Over in San Antonio, with the Alamo and the Spanish Governor's headquarters still preserved for posterity, with the last stand of "Davey" Crockett still a source of fierce pride to every Texan, is Frank Hunter, Sr., publisher of San Antonio Express, a leader in the civic life of his state, a man who has spent a lifetime in service to his fellow citizens, a philosopher, friend and counsellor, himself a rich text-book of early Texan history. And his own remaining years, devoted to civic, political and business, stretching over many decades, would be a best seller.

Then through to teeming California, alert to its destiny as the gateway to the Orient and the center of the world's trade gravity. Here are a restless, energetic people, aware but impatient of acute housing problems, swollen populations, and construction shortages. Impatient because the free man and go on even for a moment, that swelling stream of human life so intent

on pushing on to that new place in the world's sun, which destiny, climate, geography and faith have reserved for them.

In the Los Angeles area I had time to visit the press and editorial rooms of the *Daily Times* and *Daily News*, and to talk briefly with the men who are directing policy, who are aware of and keenly grasping the rattle of the magnificent future which is theirs.

At the Los Angeles Times, Mr. Hotchkiss, managing editor, had just returned from a trip to Europe. "Americans," he declared, "scarcely realize just how sick Europe is after six years of enervation by war, disease, pestilence, strain . . . but Britain is facing the future courageously, and is still a great force in shaping world policies."

Mr. Lay Payne, editor of the *Daily News*, showed student of current affairs, steeped in the background and history of his state, gave us a vivid and considered resume of national trends and an analytic glimpse of conditions in California. Publisher Manchester Boddy, whom we had hoped to meet again, was ever in Europe, but his penetrating, analytic articles on Occupied Germany wired back daily, were being eagerly read by the public.

And on to Hollywood, to renew an old friendship with Mr. Harwood Young of the *Hollywood Citizen News*. Mr. Young wasted the better part of a day showing me the sights of his famed city—and straightening me out on several misconceptions I had entertained of Hollywood and Hollywood publicity. As a result of Mr. Young's succinct summaries, I became overnight a source of interest (temporarily) to our Hollywood-minded stress—great break!

From Los Angeles on to San Francisco, for an all too brief stopover, where I made a quick dash in and out of the San Francisco News. Another old friend, Business Manager Fred Steuts, busy studying a new union contract, introduced me to Mr. Gauthron, publisher of the paper. Dynamic, vigorous Mr. Gauthron, in ten minutes, unfolded more of the color, history and civic life of San Francisco than I had garnered in half a dozen "tourist" visits.

I broke the Purple Band contact at the Golden Gate—and flew back to Vancouver, with memories of unequalled hospitality, of men and organizations, planning, acting, fighting in a free world, convinced that western democracy, built by free men and maintained by the free choice of lives, would survive and go on to greater triumphs and even greater accomplishments.

Left: Los Angeles "Daily Times", discussing publicity with Dick Robinson, Assistant Personnel Director.

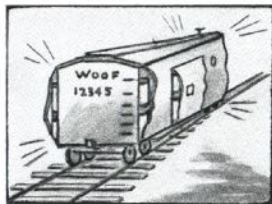
Center: In San Antonio "Express" Pressroom, with Harry Kilgore, Pressroom Foreman (left) and Mr. H. Auali, Mechanical Superintendent.

Right: The Powell River Triangle, in Houston "Chronicle" Pressroom.





Where's my Tonnage?



By OSWALD CRAWFORD

Traffic Manager, Powell River Company Limited and Associated Companies

Where's my Tonnage? This is a burning question in these days when publishers are seeking every ounce of newsprint to keep presses running.

We in the traffic department, who receive the brunt of "WHERSMY", are doing our best to ship it out by whatever means we can best land it on your doorstep.

In this outline, I hope to show in lighter vein perhaps, some of the difficulties that confront us from the moment our paper is manufactured.

Powell River is a water-locked port situated on the Gulf of Georgia about 80 miles north of Vancouver, B. C., our nearest rail loading connection. The two large covered docks or piers, with ample deep water-berthing facilities for loading and off-loading ocean-going vessels, are located adjacent to the plant. Both units are equipped with Barlow Elevators for coastal vessels and covered barge loadings and off-loadings. One dock has a nice large 50-ton crane to handle heavy lifts—just in case. Over these docks must pass the bulk of the inward raw material with the exception of logs, of course, and some 20,000 tons monthly of consumer "WHERSMY" products.

For some time now the handling of our paper products from the finishing rooms to the docks has been a 100 per cent mechanized operation. The paper is put on pallet boards in the finishing rooms and moved on the boards by inter-plant rail cars to the docks, there to start on its purple-band journey to all parts of the world.

The arrival of an ocean vessel with two or three thousand tons of sulphur, a few scows of lime rock, a couple of

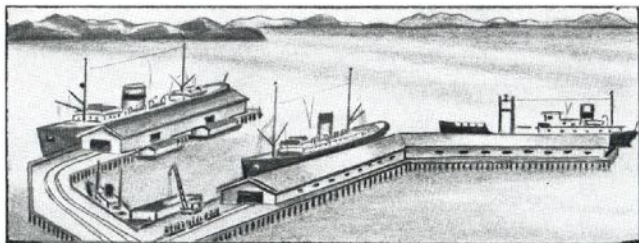
coastal vessels and barges loaded with machinery and much needed supplies, bring loud applause from the producer "WHERSMY" but frowns from the consumer. However, for the express benefit of the consumer "WHERSMY" we operate through the medium of the Kingcome Navigation Company to such destinations as may be located in British Columbia, the Canadian Prairies and the United States, a fast schedule from Powell River four times weekly. Two covered watertight barges loaded with about 400 tons each are towed tandem fashion by powerful Kingcome Navigation diesel tugs to Vancouver and are there transferred into rail cars, if there are any available.

The cute trick, of course, to maintain this rapid schedule is to get these barges unloaded promptly and on their way north, and if you don't, then things just start to happen and "WHERSMY" starts buzzing all over the place.

The stunt of loading about thirty carloads off barges at Vancouver into ten rail box cars seems to be the present "64-dollar" question, and unfortunately we have not found the answer to it yet. There really must be a car shortage for we just read somewhere that for every new car put on the rails, three poor war-wearied boxes go to the scrap heap; also that the rails need 40,000 new cars pronto and the Government really must do something about it immediately. Apparently all classes of car building material have been held up by some kind of labor difficulties.

The unprecedented grain and foodstuffs movement to Europe to feed the war-hungry population, plus the many hundreds of cars tied up underload all over the country due to longshore maritime difficulties and what-not, has contributed to the puzzle.

The consumer "WHERSMY" knows when the tonnages leave Powell River and watch this transfer operation very closely. So to help the rail in their hour of need, we comply faithfully with all the rules and regulations



Oswald Crawford is a man of parts. In addition to telling some of his traffic problems, Oswald also does his own illustrating.

of the Maximum Carloading Rule and our cars leave the docks fairly bulging. In fact on one or two occasions, whether from over-enthusiasm or the fact that the equipment came over in Noah's Ark, the sides bulged right out.

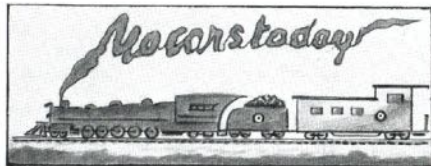
For the consumer "WHERSMY" in and adjacent to Puget Sound a nice schedule twice weekly from Powell River is carried out through the medium of the Puget Sound Freight Lines. Fast elevator-type loading vessels with war-like names such as the *Warrior* and *Indian* swoop the paper right off our docks at Powell River, on the pallet boards, and lay it gently down on the docks at Bellingham, Seattle or Tacoma, Washington, still on the boards. This method has been instrumental in eliminating much damage in the handling.

The newest addition to this fleet is the MS. *Lovejoy*, a brand new 600-ton diesel freighter, and she loads and discharges at a rate of about 50 tons per hour—not bad, eh?

To let the consumer "WHERSMY" in on a little secret, when we get tired of trying to put 30 cars into 10 rail boxes at Vancouver, we pop as many as we can in the captain's cabin of one of these steamers and sneak them out via one of these ports. Our little ruse does not always work, however, for alas, they do not seem to have any more cars at these ports than they do at Vancouver.

Tonnage for England and Australia, etc., is mainly loaded direct to steamer at Powell River, when we can lure them there. They have a nasty habit of dropping in for tea about umpteen days off schedule but as the super has had their cargo in his hair for about three weeks he is always glad to see them. Sometimes, however, they get quite coy and we have to barge their tonnage all the way to Vancouver and there load overside.

As vessels plying to the land of the "Hula-Hula" are in such a hurry these days, when not tied up due to labor difficulties, tonnage for consumer "WHERSMY" in that fair part of the world moves presently via Seattle. For the California "WHERSMY" we also had a nice schedule of a fast steamer operating from Powell River to California ports at least twice monthly, but recently it fell by the



wayside temporarily until the maritime disputes as to who washes the dishes on board ship was settled. The schedule has since been resumed.

Yes, Mr. "WHERSMY", it's quite a job to program, schedule and keep moving the monthly tonnage of one of the largest paper mills on the Pacific Coast, and notwithstanding labor difficulties, weather conditions, shortage of dock space, shortage of rail loading equipment and many other causes that frustrates movement of such a large tonnage for all parts of the world, you may rest assured that in answer to your enquiry, "Where is my tonnage?" the Traffic Department is doing its darndest to get it to you promptly.

"Where's my hat?"

SEEN' THE WHIRL

Tish: "Whaddya' mean Henry is a sailor at heart?"

Tush: "Well, he's got a sweetheart in every davenport in town."

Teacher: "What king was it who said: 'A horse! A horse! My kingdom for a horse!'"

Pupil: "Don't ask me, teacher. I dunno even who it was that said: 'I'd walk a mile for a camel!'"

NATURALLY

Scotty: "My wife dreamt last night that she went to a sale and spent two dollars for a dress."

Sandy: "What did you do?"

Scotty: "I made her go back to sleep and buy it for a dollar ninety-eight."

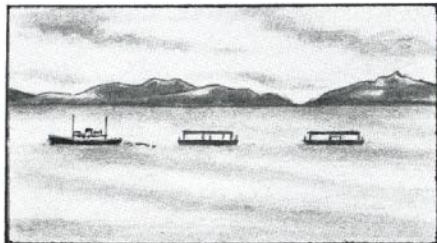
CRACKS

First gal: "It must be nice to be married to a radio star comedian."

Second ditto: "Yes, I have witties every morning for breakfast."

Young husband: "Last night when I got home, my wife had my dinner all ready, my slippers at the door for me to put on, my pipe filled, and—"

Cynic: "How did you like her new hat?"



25

Year Club

25

Quarter Century of Service Brings Concrete Benefits

Among the interesting, perhaps novel features of Powell River Company's Employee Welfare organizations is the TWENTY-FIVE YEAR CLUB.

The formation of this club three years ago was a definite recognition by the Company of the outstanding loyal services of employees who have served with them over a period of a quarter of a century.



*Charles Godfrey,
President 25-Year Club*

The Powell River Twenty-Five Year Club is not an empty gesture. It does not begin and end with conferring a badge of service on the particular employee.

It begins with the presentation to a worker who has completed twenty-five years of continuous service of an imported Swiss gold watch, suitably engraved with the employee's name and the reason for the presentation.

But membership in the club carries other real and concrete benefits. Every member who is off work, due to illness, is carried on the pay roll at his regular rate for three months; at half pay for

the next three; and one third pay for the final six months. Many members have already benefited by this privilege, and in three years of existence the Powell River Company has paid out several thousand dollars to its Twenty-Five Year employees.

New members are inducted into the club each year at the Club Annual Banquet, to which all members and their wives are invited, and at which all top executives attend. The annual dinner of the club is now one of the major social functions of the season—and for jollity—and yes, skylarking—it is unsurpassed.

Today 100 employees are enrolled in the club, and more are waiting induction at the big spread next May.

These Twenty-Five Year Club members are the men and women who built Powell River; who have watched their town grow from a hamlet to a city; who have stayed with the company through fair days and foul. Many were present when the first axe bit into a tree in construction days.

The club is a tangible recognition of long and loyal service; and membership, closely linked by mutual service bonds is something to which hundreds of employees look forward. The Twenty-Five Year Club is now an institution in Powell River.

25

Year Club

25

Hunting and Fishing Still Good



(1) Apprentice, Dick Cattermole, (left) and millwright, Hubert Rusbant, with a nice catch of Powell Lake trout. (2) Deer hunters still find plenty of excitement in the area. "Brick" Harper (left) and Ossie Stevenson bring in a big buck. (3) Editor, Jenkin L. Jones, of Tulsa "Tribune", finds the big fellows in Powell Lake bite for visitors. (4) They got their goat. Jim Gilchrist poses with veteran Al Adams after an afternoon chasing billies around the cliffs. (5) Jobu Sample (right) and Jack Betts are trying to kid somebody that what they shot was a bear and not a stray dog. (6) The King of Birds brought to earth by Hubert Rusbant and Roger Taylor.



Potential power! Company surveyors on the annual snow survey of Powell Lake watershed.

—Photos by P. R. Lockie.

OUR POWER SUPPLY

By Wm. Jamieson, Field Engineer

Powell River on the 49th parallel owes its existence and became the site of one of the largest paper mills in the world due to its close proximity to extensive drainage areas from which an ample supply of water can be developed for operating the mill.

The chief source of power is obtained from Powell Lake, which has a drainage area of 580 square miles. This lake, which with Goat Lake has an area of 47 sq. miles, formerly overflowed and discharged into the sea by a short length of river known as Powell River and from which the town derived its name. The lake has one unusual feature, being very deep in places, depths up to 1250 ft. having been sounded, proving that the bottom at these points is lower than the bed of the sea into which it discharges.

In 1910 the river was harnessed for hydro-electric and mechanical power by the construction of a concrete dam which later in 1924 was raised to elevation 284 to provide for increasing demands. This dam, including the head gate section, has a total length of 802 feet and height of 52 feet from river bottom with a spillway of 550 feet in length. To enable the overflow to be regulated, 19 Taintor gates have been provided, each capable of discharging 3938 cubic feet per second when the lake is at the maximum permissible height. The dam gives the lake a usable storage of over 708,000 acre ft. and provides for a continuous usage of 2470 cu. ft. per second. Water for operating turbines is conveyed in four penstocks, three of which have a diameter of 11-ft. 4-ins. and one a diameter of 14 feet, and the turbines operate with an average effective head of 157.5 ft.

Part of the water available is used to drive horizontal turbines directly connected with pulp grinders; the remainder is converted to electrical power. The hydro-electric

generating plant consists of four generators of a total capacity of 21,350 K.V.A. with auxiliary steam generating plant in reserve for use in case of need.

In 1929 demands for greater production made it necessary for the company to find a further source of power, and the water rights for the adjoining watershed to the south draining into the Lois and Gordon Pasha Lakes were obtained.

This Lois River development, 13 miles by airline and 17 miles south by road from Powell River, consists of the utilization of a chain of lakes known as the Lois or Gordon Pasha Chain. The three main lakes actually included in the reservoir are the Lois, Gordon Pasha and Khartoum Lakes. North of these is a mountainous country from which they are fed by streams connecting up with Horse-shoe, Nanton, Dodd, Lewis and Windsor Lakes, and with still other lakes at higher levels.

The drainage area included in this development comprises 184 square miles. At the present time the variable arch concrete dam, named the Scanlon Dam, which spans the Lois River, is being raised 20 feet to the full height for which it was designed. When completed, the dam will have a crest of 680 feet, thrust block 115 feet, two wing walls and will have a maximum height of 205 feet above the river bed. The storage impounded will amount to 442,255 acre feet, providing for a continuous flow of 790 cu. ft. per second.

An extension in a radial direction from the thrust block at the west end will be provided with five Taintor gates 20 feet wide and 21 feet deep, and one Taintor gate 10 feet wide and 10 feet deep to pass trash and small discharges.

The water is conveyed to the power house on the coast at Scow Bay through a reinforced concrete penstock 12½

feet in diameter for a distance of 776 feet which connects with a tunnel 5851 feet in length. From the lower end of the tunnel a steel penstock 2591 feet in length and varying from 12 feet to 11 feet in diameter, connects with two 7¾-foot diameter pipes to the Power House.

The equipment in the power house when the new generator about to be installed is completed, will consist of two 18,000 K.V.A. Generators operated by two 24,000 H.P. turbines. A 13½ mile high tension transmission line conveys the power generated to Powell River.



W. Jamieson

boilers and is an important factor in saving oil and hog fuel.

A large part of the drainage areas consists of a rugged mountainous country, some of the mountains in the region of the head of Powell Lake reaching a height of 6000 feet and over. In a normal year these mountains accumulate a mantle of snow which as it gets deeper slides down into the valley where in shaded locations it accumulates and remains until well into the following summer. Normally the snow begins to melt in April and to be for the most part melted and carried away in the swollen streams by the end of July. This melted snow added to the ordinary precipitation during that period gives us in a normal year a considerably increased run-off during this period. To anticipate the volume of this run-off and to utilize this seasonal excess of water which may be more than required to operate the mill and fill the lakes, to the best advantage, it was decided to inaugurate a system of Snow Surveys. These surveys are made as nearly as possible each year at the same time, between the 20th and 27th March.

Snow Survey Stations have been marked out back from the Head of Powell Lake on the East side of the Upper Powell River and one on the West side of the river about 3½ miles from the lake. At No. 1 Station on the West side of the river 3 courses have been staked at elevations 2,200, 2,600 and 3,100 and on the East side 2 courses at elevations of 2,400, and 3,350. The courses are on carefully selected sites where the snow cover will be as

free as possible from drifting snows and slides. The courses for 1,000 feet in length have been cleared and planted to mark the points where the measuring is done.

The measurements are co-related to the percentage of the zone area in which the course is located, and tributary to the same, enabling a weighted average to be calculated for each zone. Based on these zone averages and previous records for run-off, an estimate can then be made of the probable quantity of water that can be expected to reach the lake during the period April-July. This information enables us to determine the amount of water available for mill operations.



More potential power.



GOOD UNDERSTANDING

Junior: "Daddy, what's a sweater girl?"

Daddy: "A girl who works in a sweater factory." (A slight pause.)

Daddy: "Say, where did you get that question?"

Junior: "Never mind that, daddy, where did you get that answer?"



Carrier planes of the "Express" Publishing Company, ready to take off.

Pigeons, Planes, Combine Old and New in San Antonio

It's Texas "U" vs. Oklahoma at Austin. The game has been under way five minutes and the Longhorns have the ball on the Oilers' thirty-five yard line.

Suddenly the word, "There go the *Express* pigeons," ripples through the crowd—and amid a sonorous beating of wings, a flight of pigeons spirals skyward, circles the field, takes its bearings—and in line ahead, strikes straight for San Antonio, fifty miles away.

ARRIVE HOME

One hour later, a reporter, standing beside a pigeon loft, atop the San Antonio *Express* building, welcomes the flight home.

Another hour passes. The late afternoon edition of the *Express* hits the street. On the front page is an action picture of "the Longhorns on the Oilers' thirty-five yard line"—and the issue is selling like hot cakes to football-hungry fans.

The "PIGEON EXPRESS" has come through again. The enterprising San Antonio *Express*, with Frank Huntress, Jr. holding the managerial reins, has used these birds in a novel and spectacular advertising and sales program.

CONFERENCE GAMES

Each Saturday, when the big Conference games are played at Austin, the *Express* photographer starts snapping pictures a few minutes after the opening whistle. The negatives are tied on the pigeons, who fly them direct to San Antonio where they are developed, rushed through the engraving department in time for the late editions. Successive relays of pigeons are released during the game.

Use of pigeons in these days of radio, fast plane and railway service might seem to parallel a race between an old square-rigger and the *Queen Elizabeth*. In reality, this ingenious pigeon service is the most economical, practical and speedy means of transporting the films across

the fifty mile gap to San Antonio. Train schedules do not dovetail with highlights of a football game. And by the time films could be carried to and from airports on the outskirts of both cities, the trusty pigeons are winging into their lofts in the *Express* Building. Plane costs would be prohibitive—and no more effective.

SPECTACULAR ADVERTISING

It's a spectacular advertising stunt, for the birds make quite a show as they rise in the air, circle the Oval and head for home. Every spectator knows, or is soon told "that these birds are carrying films to the San Antonio *Express*". According to Mr. Huntress, these streamlined air cutters travel close to a mile a minute—which tops train averages.

The San Antonio "Pigeon Express" is not only smart and economical advertising. It is alert journalism, recognizing and turning to its own advantage a peculiar local situation.

PLANES, TOO

Pigeons are only one side of the *Express* transportation shield. Turn it over—and you are back in the modern, streamlined, fast-moving world. The aeroplane in another phase of the *Express*' operations, is the carrier.

The *Express*, like many other metropolitan dailies, has considerable circulation, often under highly competitive conditions, in its immediate hinterland area. Train or bus service, in these circumstances, when first and each delivery is essential is not always the answer to the circulation problem.

In its hinterland deliveries, the *Express* takes to the air—and flies its daily editions to Corpus Christi, Beaumont and other centres

"Let's play empty space."

"No, that's not fair, you've got a head start."

New Paper Machine

By WM. BARCLAY, Vice-President, Powell River Sales Co. Ltd.

"Number Eight is going in." This recent announcement by the Powell River Company will be of interest to hard-pressed publishers—and to employees at Powell River.



W. Barclay

The installation of an eighth newsprint machine is part of the company's plant modernization program—and will mean an additional 25,000 tons of newsprint annually—an increase of approximately ten per cent.

With No. 8 in operation, Powell River's annual production will be about 250,000 tons, which means the plant will be the largest individual newsprint unit in the world.

Unfortunately, the installation of the new machine does not mean an unlimited supply of paper for our customers. Far from it. Powell River Sales Company has on its customer list a large group of permanent contract buyers, who normally would have increased their consumption from five to ten per cent over

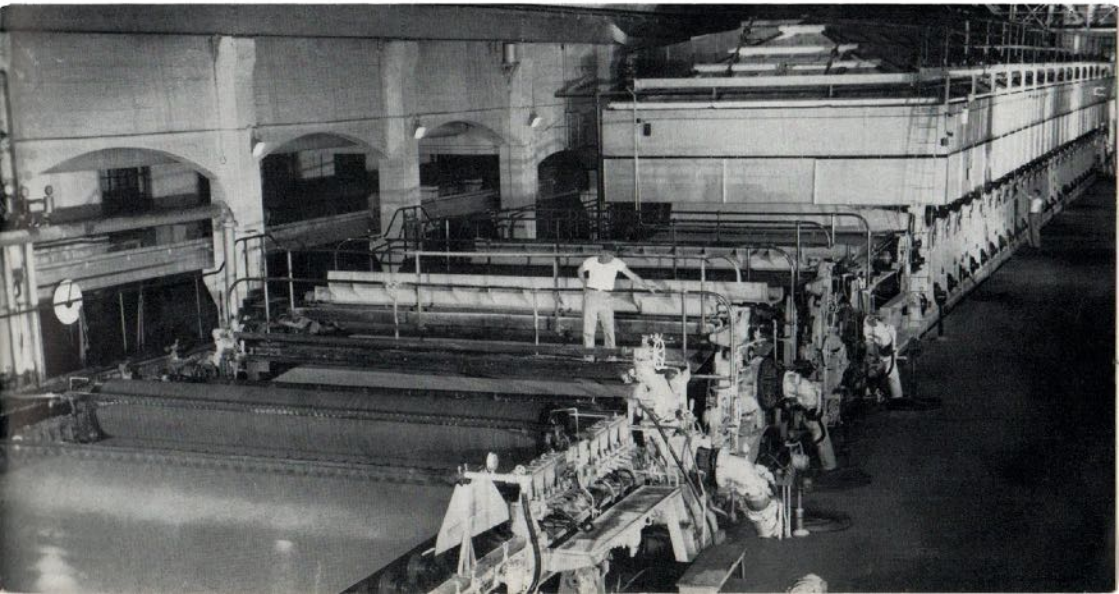
the past few years. War conditions have held tonnage down to the pre-war level—and the ten per cent. increase, following the installation of No. 8 will only take care of our regular customers' deferred requirements.

A close survey of potential newsprint supplies by competent authorities, indicates that the present over-all world shortage will continue and even grow more acute.

The Pacific Coast area, due to changes in population, probably faces the most immediate effect of the world shortage and will likely face this condition for several years, basing the amount of shortage on over-all average of United States per capita consumption. The condition can only be corrected by increased imports, the establishing of additional producing capacity or a curtailment in per capita consumption. Expanding output at Powell River will help to correct the Pacific Coast situation.

The new machine will operate at 1,600 feet per minute when first installed—and is designed for an ultimate speed of 2,000 feet. When completed, it will be the most modern and fastest machine in the world.

"Number Eight" is being built at Lachine, Quebec, by Dominion Engineering Works Ltd., well-known builders of paper mill machinery.



Memorial Unveiled to S. D. Brooks



Harold S. Foley

Mrs. S. D. Brooks

"Powell River was Mr. Brooks' pride and joy. He was always eager to approve any measure that meant better living and working conditions in this plant and community."

In these words, Mr. Harold S. Foley, President, Powell River Company, paid a tribute to a founder of the Company at a recent unveiling of a memorial plaque in honor of the late Sheldon Dwight Brooks. The plaque is placed at the entrance of the machine room buildings.

"During his leadership," Mr. Foley continued, "this Company earned an enviable reputation for integrity and fair dealing.

"We will miss his counsel, advice and guidance. My hope is that we, who are to carry on and establish policies in the future, will always recall Sam's human approach to any situation, when we make decisions.

"This type of memorial, placed where it is, was Sam's

idea of an appropriate and dignified way to record for everyone the contributions his predecessors made to the Company and society.

"I know he would approve of this simple memorial for himself."

Following Mr. Foley's brief address, Mrs. S. D. Brooks, widow of Mr. Brooks, officially unveiled the memorial to her late husband.

Members of the family came to Powell River for the ceremony. These included Mrs. S. D. Brooks, Miss Greta Ann Brooks, Mr. and Mrs. John Gormley, Mr. and Mrs. William Brooks, and Sam MacDonald Brooks.

The plaque, commemorating the association of Mr. Brooks with Powell River, is the fourth to be unveiled. It takes its place in the company of those other great pioneers, his father, Dr. Dwight F. Brooks, M. J. Scanlon and Anson S. Brooks.

IN MEMORIAM

SHELDON
DWIGHT
BROOKS

1878
1946

CHAIRMAN OF THE BOARD
POWELL RIVER COMPANY
1940-1946

BUILT-IN Protection



The Powell River asphalt laminated wrapper used on newsprint rolls was engineered at Powell River.

The illustration shows unique 3 ply construction of paper-asphalt-paper which makes this outstanding roll wrapper. Specially built machinery at Powell manufactures the wrapper to strict specifications.

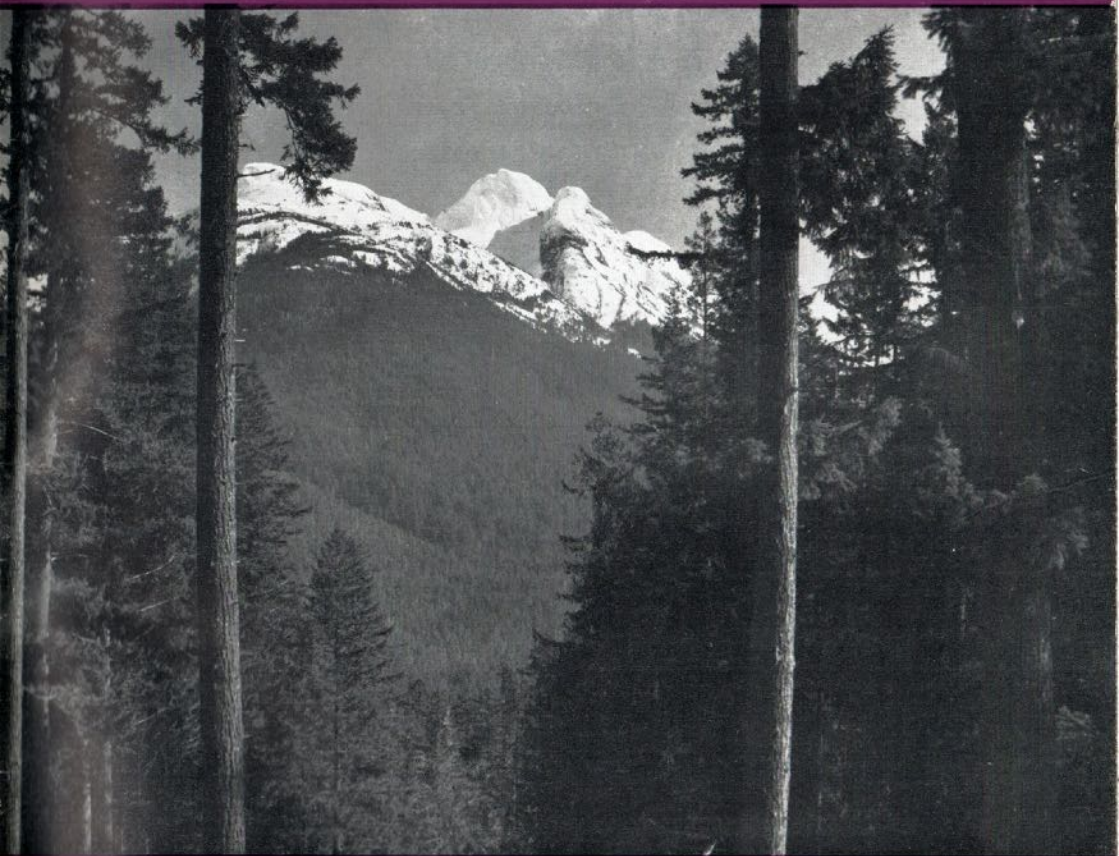
The asphalt centre provides effective protection against moisture-laden air. This effectively prevents wrinkles in the paper.

Each roll of Powell River newsprint is packed with vapor barrier wrappers.

POWELL RIVER NEWSPRINT

Powell River

DIGESTER



Volume 23

MARCH - APRIL, 1947

Number 2

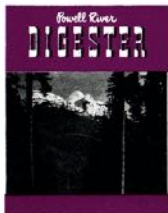


Powell River
DIGESTER

Published by
POWELL RIVER COMPANY LTD.
Standard Building
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Editor
J. A. Lundie
Staff Photographer
O. J. Stevenson

Through the pages of this journal we hope to tell our readers about Powell River and its products.



The Cover Picture

The principal theme in this issue is the story of our forest resources.

On the cover page, one of Leonard Frank's well known scenic views, is Mount Arrowsmith, famous Vancouver Island landmark, located in the heart of, and gazing majestically down on, the great timbered areas of the Island. Mount Arrowsmith may, on a clear day, be easily seen from Powell River.



Indian totem poles in Vancouver's famous Stanley Park.

Leonard Frank photo.

What is a Totem Pole?

Or a short story of the "Talking Sticks"

In Vancouver's famed Stanley Park a major attraction for tourists is the Indian totem poles. These weird monuments are becoming of increasing interest to the world at large and each year thousands of miniature totem poles leave the Pacific northwest as souvenirs.

Totem poles were carved from carefully selected cedar trees. The carving was done by a few master craftsmen who passed their skill and knowledge down to their sons. The process of carving would take from six months to a year. Pigments made from ochres, charred wood and possibly from copper, were mixed with fish oils and skilfully blended into the designs. The Indians of North America knew the secret of fast colors which withstood the ravages of time and weather long before the white man came.

The totem pole might be called the history book of a primitive people who, through carving and painting, communicated to their descendants events and traditions in the life of their people. So far as is known the totem poles were never worshipped as gods. They were honored chiefly because some of the symbols were guardian spirits.

There were two main types of poles—the house pole used either inside or outside their homes, and the memorial pole. The latter was usually erected as a memorial to a deceased chief when the days of mourning were ended. Amongst the Haida tribe, found in the southern portion of Alaska and on the Queen Charlotte Islands, it was

often a custom to bury the body or ashes of a chief in the top of a totem pole in which a cavity had been provided.

In the group of seven poles near famed Lumberman's Arch pictured above are the DSCO-KWA-DSI pole, said to have been erected by Chief Kla-ool-dso-lah at Rivers Inlet in 1894, a replica of its prehistoric prototype "The Magic Pole" of the deserted village of Kway on Fitzhugh Sound; two identical Thunderbird house posts from Kingcome Inlet, B. C.; the WA-KIUS or NAN-WA-HA-WIE which tells the tales of Chief Nan-wa-ha-wie who feared no one but the cannibal giant of Forbidden Valley; SI-SA-KAU-LAS commemorating the legend of See-wid, a young chief who lived at Kingcome Inlet; the NHE-IS-BIK pole, the legend of how the salmon came to Rivers Inlet; and the SKE-DANS pole from Skidegate on the Queen Charlotte Islands, called by the Haida tribe, The Grave of Skedans.

How closely these totem poles can be associated with Powell River newsprint may be drawn from the inference that some of these same cedar poles grew up alongside spruce and hemlock trees which today are being hewn down by modern logging methods. Kingcome Inlet, from which three of the poles in our story came, was the site of Powell River Company's first large scale logging operation, while Skedans Bay on the Queen Charlotte Islands is today the site of one of the logging camps of a subsidiary company, the Kelley Logging Company.



Here is your future newsprint on the way to conversion to paper. Piles of gigantic spruce logs assembled in Queen Charlotte Islands on the first leg of their journey to Powell River.

Your Future Newsprint Supply

By GEORGE W. O'BRIEN, Vice-President
in charge Timber and Logging Operations

Vice-President George O'Brien says:

"We are going to stay in the newsprint business. Our objective is to supply users of Powell River paper on a perpetual basis. This factor is the keystone of our forest policy."

From Texas, Arizona, California; from British Columbia and Alberta; from New Zealand, Australia and China comes the same cry—"We need more and more newsprint." Each plea is urgent—tomorrow, next week, or, at the latest, next month.

We are doing everything that is humanly possible to satisfy your immediate needs. It must be realized that our production is controlled by certain physical limitations, first of which is "Plant Capacity" and secondly, the amount of raw material (wood) which is available to the Mill.

Prior to the war our newsprint production was gauged by the volume of our sales.

Then came the war with its attendant shortages of labor and raw materials. Our production program was then regulated by conditions beyond our control. We will never forget the heartaches and disappointments that we were forced to endure by reason of our inability to secure

one essential commodity or another, in a volume sufficient to meet our needs. Wood, in the form of logs, was the worst headache during the war.

Now that the war is over, we have been unable so far, for one reason or another, to reach a satisfactory inventory position in this basic raw material. We hope, with steadily improving conditions, to soon solve this problem.

Our Company has been conscious of its timber position since its very beginning, always striving to maintain what was considered to be an adequate reserve for the future. But what was considered "adequate" ten years ago would not suffice today in the light of the changed conditions. A few years ago, forest lands, on the Pacific Coast, could be purchased freely from private owners. The supply of timber was generally considered to be "inexhaustible". The acquisition of timber was merely a matter of buyer and seller reaching an agreement. During this period the Directors of our Company, very wisely, established a policy of acquiring by purchase or cutting contracts, at least double the amount of timber that was consumed by our operations each year. This policy has been steadfastly maintained, with the result that today our timber reserve consists of more than six billion feet board measure, of mature standing timber.

To the layman, a figure of six billion feet probably has little or no significance. However, expressed in terms of land area, if our timber holdings were contained in a solid block they would cover an area of 676 square miles and geographically, would form a square, each side of which was 26 miles in length. Alternatively, it would represent a belt of timber one mile wide which would stretch from the Canadian-United States Boundary to Eureka, California, or from the northern boundary of Texas to the southern tip of that state.

Considered in terms of "wood-years", it means approximately 33 years' supply under present methods of wood

utilization. However, we are not satisfied with present utilization results and we are confident that improvements in manufacturing and logging now under way, and those contemplated in the near future, will yield at least 20 per cent greater realization from our wood. The same six billion feet of timber would then supply our needs for 40 years instead of 33 years. Highly trained personnel are continually endeavoring to develop methods to obtain more wood from each acre of timber land. Great strides have been made. Our efforts toward this will be unceasingly carried on.

Our policy of acquiring timber by purchase for our future needs is still in force and will so remain as long as there is timber available and a need to protect our future supply. Efficient timber cruisers on our staff are ranging the forests to carefully investigate stands of timber that will fit in with our needs for future wood requirements. In the meantime, lands from which we removed a crop of timber, ten, twenty and thirty years ago, are producing another crop of trees. By the time our present reserves of mature timber are harvested, those lands which produced our timber in the beginning will be ready to

harvest again. Once the cycle is established it can be repeated over and over again, so long as the proper balance is maintained between annual growth and annual consumption. That, of course, is our aim.

And so, in view of the conditions which I have outlined, the question then becomes—is it more important to you to have additional supplies of newsprint *now* at the risk of having none at some date in the future, or would you choose to build your business on a solid foundation with the knowledge that a supply of newsprint will be available to you—not for your life span alone, but in perpetuity?

We intend to stay in the newsprint business and our objective remains to supply newsprint to users of Powell River paper on a perpetual basis. This factor is the key-stone of our forest policy.

The U.S. and Canadian paper industries will spend over \$1,000,000,000 in 1947-48 in expansion to meet the "greatest demand in history", the *American Paper Merchant*, a trade magazine, states.



Typical Pulp Wood Stand Showing Various
Aged Trees — and Second Growth Timber
Coming Up.





T. Bruce Fallows

A Visit to Down Under

By T. BRUCE FALLOWS

*Secretary, Overseas Committee,
Newsprint Association
of Canada.*

On 11th July, I set out from Montreal for Australia and New Zealand on an assignment from the eight Canadian newsprint companies who supply more than 75 per cent of the newsprint consumed there. For simplicity I'll call it a fact-finding and goodwill mission.

The first leg of the journey brought me by air to Vancouver and Powell River. I had almost forgotten the grandeur of the West Coast through long absence, but my visit to Powell River quickly refreshed my memory. My visit enabled me to renew old friendships and make new acquaintances and it was really from the friendly and busy atmosphere of Powell River that I set out from Canada en route to Australia and New Zealand.

It was there also that I got the first inkling that my itinerary would be upset several times before my return home. Coincident with my departure from Montreal, Constellations had been grounded. As a consequence all flights to New Zealand from San Francisco were cancelled indefinitely. And, as a further consequence, I set sail from San Francisco on August 1st in the S.S. *Marine Falcon*. Some ingenious soul described her as an "emergency carrier". A few days out from San Francisco, passengers with more realism than ingenuity re-classified her and bestowed on her the name SS. *Floating Flophouse*. We called at Honolulu and Pago Pago for a few hours, at Auckland for a week-end, and I finally arrived in Sydney on August 23rd—one month late.

Starting from Sydney, I visited Melbourne, Hobart, Adelaide and Brisbane. Regrettably, time and distance prevented my visiting Perth. These cities represent the main metropolitan areas in the six states. Their combined population is half the total population of Australia, and both Sydney and Melbourne have populations exceeding one million persons. There are to be found the large

metropolitan newspapers which consume the bulk of the newsprint used in Australia. Newspaper readership in Australia is exceedingly high. Before the war the per capita consumption of newsprint in Australia was approximately 58 pounds annually. During the war it dropped to as low as 15 pounds per capita due to shipping and dollar shortages and this year it is expected to be about 46 pounds per capita. For comparison the pre-war per capita consumption of newsprint in Canada was approximately 33 pounds. It remained close to that level throughout the war period and in 1946 is expected to rise to 40 pounds. While newspaper readership in Australia is high, magazine and radio development has been relatively limited. I believe this fact, coupled with Australia's great distance from other world centres, accounts largely for the greater activity in the newspaper field.

I had three days in Tasmania, the first in Hobart, the second at Boyer visiting Australian Newsprint Mills Pty. Limited and the third at Risby's Basin where I saw part of the logging operation. At Boyer they are turning out newsprint at the rate of 34,000 tons annually on a 170-inch Walsley machine using *eucalyptus regnans* (swamp gum) for their groundwood pulp. As you know, they obtain a large part of their unbleached sulphite pulp for news furnish from Powell River. The company holds concessions on approximately 300,000 acres of eucalyptus in the Florentine Valley in Central Tasmania which must be opened up by 1950 if the concession is not to lapse. The company is publisher-owned and to meet the current newsprint shortage, and in keeping with the Australian policy of developing secondary industries, is taking active steps to increase the capacity of the mill. They have ordered a new 240-inch Walsley machine with an estimated capacity of 45,000 tons of newsprint annually and hope within the next three to five years to have the expanded mill in production. In conjunction with the news-

print mill they plan installing sulphate pulp capacity which will supply them with bleached sulphate pulp for news furnish and kraft for mill wrapper. It is estimated that the maximum capacity which the forests will support on a sustained-yield basis is 78,000 tons of newsprint annually, supplemented by sufficient sulphate production to meet the newsprint mills' needs.

For 1947 the Australian publishers want 280,000 tons of newsprint. They have the import licences and dollars. With between 30,000 and 34,000 tons of production expected from their Tasmanian mill, this indicates a potential consumption in 1947 of 314,000 tons. Publishers look to the Canadian mills to supply 85 per cent, or 238,000 tons of their imported newsprint. This compares with imports of approximately 150,000 tons annually from Canada before the war. The Canadian mills expect to be able to supply about 160,000 tons in 1947 which is better than the pre-war average but represents only about two-thirds of the demand.

The position in New Zealand is somewhat similar but on a smaller scale and without any local newsprint production. Before the war New Zealand imported about 36,000 tons of newsprint annually, of which some 32,000 tons were from Canada. For 1947 they want 29,000 tons



from the Canadian mills and have the necessary import licences and dollars. The mills expect to be able to supply 26,000 tons next year. My New Zealand visit was limited

to Auckland and Wellington but was during the publishers' semi-annual conference which enabled me to meet most of them.

In both markets there will be voluntary rationing of newsprint to ensure equitable distribution in view of the prospective shortage. The publishers want to see the end of all controls and a return to normal just as we do. I have mentioned the foregoing statistics to indicate the extent of the continuing market for Canadian newsprint which exists in both countries. They are long term markets and above all else want long term security of supply. They look to the Canadian mills for it.

All of the publishers and others whom I met have a high regard for their Canadian suppliers. The industry's past performance, particularly during the war period, has earned their admiration. They are friendly and hospitable and want to have many more of us visit them to discuss our common problems. We have a strong bond of mutual interest with them and it is worth preserving.

I left Sydney by air on October 27th and reached Vancouver four days later en route to Montreal where I arrived November 4th. I spent 51 days in Australia, 11 days in New Zealand and three days travelling between them. The round trip involved 20,000 miles by aircraft, 7,500 by ship, 1,000 by car, 800 by train and 3½ in a locomotive cab. It was worth it.

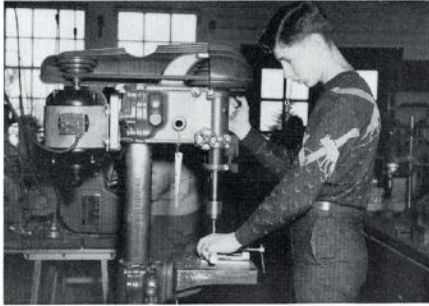


Newspaper World said Sir Stafford Cripps, president, Board of Trade, told a publisher's deputation that Canadian imports and estimated home production left a 57,000-ton gap between supply and consumption on a six-page basis. No currency will be freed for further Scandinavian imports and Canadian manufacturers are not expected to be able to increase shipments, Sir Stafford said.

The trade paper said a position could arise where newspaper sales might have to be pegged again to assist an increase in size.



Venezuelan publishers and Government officials are apprehensive about the increasing shortage of newsprint. Rising costs of printing paper have forced publishers to up their advertising and subscription rates. Publishers are planning to pool their supplies and to receive additions through a Government purchasing agent. Printing papers bearing no watermarks will be admitted duty free until March 15, 1947.

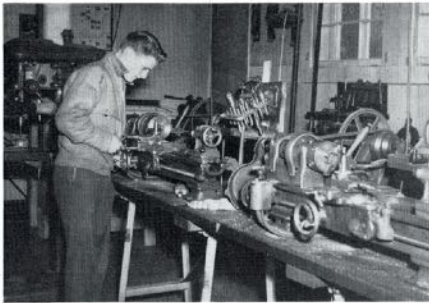


Leroy Entner works on the drill press.



Instructor Harold Gwyther (right) gives his students a chalk lesson on the floor.

Powell River Schools



Frank Stager has a lathe job to turn out.



Students in the woodworking shop.

PROMOTE

TECHNICAL EDUCATION

Powell River public and high schools are recognized as among the best staffed and equipped in British Columbia. Especially is this true of the technical division whose equipment is considered "tops" for outside communities and equal or superior to that of larger metropolitan centres.

With the Powell River Company always on the alert for pupils showing special aptitude in wood or metal working, there is special incentive for technical students. Scores of these are now employed at various trades in the plant—and each year a number enter the ranks of prospective pulp and paper mill tradesmen.

Woodworking and metal working shops and draughting rooms, are included in the technical division. The woodworking shop is equipped with three lathes, mortiser, jointer, band and circular saws, tool grinders and full bench equipment.

In the metal working shop are lathes, drill press, tool grinder, buffing and polishing equipment, sheet metal stakes and machines—and considerable electrical and radio equipment, battery charging equipment and forges.

Initially, substantial assistance was accorded the Provincial Department of Education by the Powell River Company. Its mechanical staff worked closely with school instructors and assisted in maintenance and repair of machines is frequently provided by mechanics, welders and other company tradesmen.

Interest in technical training is stimulated by the diversity of specialized operations in the huge paper mills of Powell River. There the boys can see the actual results of the principles of engineering and mechanics on which they have been receiving instruction.

Yes, Powell River schools have the staff and equipment to turn out highly trained technical students.



Mr. and Mrs.
Fred Mitchell

BRITISH BRIDE MEETS HER FIRST

Cougar

"Life in Western Canada can be beautiful—and thrilling," enthused Mrs. Fred Mitchell, recently arrived British bride of Fred Mitchell, Powell River.

"When I tell the folks back home that what I am leaning against is a mountain lion, they will probably send me a telegram to come back to civilization."

Mrs. Mitchell was referring to the picture on this page of herself and husband, Fred, photographed with a big six-foot cougar shot recently by neighbor Hans Johnson. "It was certainly the biggest cat I ever petted," smiled the attractive young bride.

Cougars, or mountain lions, as they are often called, are fairly common in the Powell River area, although in recent years their numbers appear to have declined.

The deer hunter, in particular, hates these prowling cats, whose depredations are largely responsible for the scarcity of deer and goat in many areas.

Mrs. Mitchell, who arrived in Powell River two months ago, met her husband in Brighton during the war. She is a happy addition to the already considerable "Brides' Colony" now in Powell River and has fitted into our community life.

Husband, Fred Mitchell, has been an employee of the Powell River Company for the past 20 years and the

family are well known and respected in the district. His father, prior to retirement 15 years ago, had been with the Company for over 17 years.

Fred has an impressive war record. He joined the British Columbia Regiment on June 26, 1940, and proceeded overseas late 1941. He went to France shortly after the Normandy landings with the 28th Canadian Armored Regiment, a unit of the Fourth Division. He fought in all the battles from Caen through the Falaise Gap to Holland and Belgium and entered Germany with the Army of Occupation.

He was in the thick of the stupendous struggle which raged for the possession of Falaise, and his regiment, cut to pieces by heavy enemy counter-attacks, staged one of the greatest last ditch stands in the history of the last war and were given special recognition in dispatches for their defence. In this engagement, as Tank Commander, Fred had three tanks shot out from under him, miraculously escaping with minor injuries. Two-thirds of his regiment's tanks were wiped out in this battle.

Fred was discharged in late 1945 after 5½ years of meritorious service. His travels overseas have served to emphasize only one point in his mind and that is that Powell River is still the best place in the world to live in.



Courtenay Powell's cabin cruiser.



Alec—big game buster.



Courtenay Powell



Sam Chambers

A Team on the Job

Individualists in their Leisure Hours

Here are four typical Powell River Company employees—paper makers all.

They are four members of a crew on whose united experience, skill and conscientious workmanship the reputation of Powell River newsprint, as a first-class press sheet, depends.

They are the men who make your newsprint, who work together as a co-ordinated team from the moment your stock rushes on to the Fourdrinier wire—until it emerges as a finished roll of high quality newsprint.

These four men, the boss machine tender, the machine tender, backtender and winder—man are the forwards on the larger Powell River team. They are the men who take the pass, after the ball has been worked into a scoring position by other members of the squad—sawmill, groundwood, sulphite—and other players on the back division. They are the point getters—and in newsprint production, as in sport, it's goals that count. Their combined score is the measure of their team's success in the publishing houses of the world.

There are—there can be—no individualists on this job.

These are four of the men who make YOUR newsprint—a closely knit quartette, a powerful, co-ordinated team, working together as a unit, each depending on the other to turn out a product that will meet the exacting demands of modern, high-speed printing. There is no place here for that fashionable, "rugged individualism"—which ignores the other fellow—or the other fellow's job.

How do they indulge their leisure time, these four men, who "on the job" are members of a special trade, and whose work and skills so closely approximate each other.

Let's follow them in their daily round. Boss Machine Tender Courtenay Powell may occasionally be caught

around the home hearth. Only occasionally, because most of his spare time is spent running up and down Powell Lake on his big 25-foot cruiser. Courtenay and his father, Charlie, former sprinkler foreman, built this boat, one of the most imposing in the district. It has travelled every inch of the lake—and in summer months the family spend their week-ends on the Powell luxury yacht.

Courtenay is a boatman, with some hunting and fishing thrown in on the side.

Machine Tender Sam Chambers doesn't care for boats. Sam balances his leisure moments nicely between culture and and recreation. His vocal skill is much in demand in local concerts and entertainments. He is a member of the Choral Society and a pillar in the Union Church choir. For recreation he devotes one night a week to cricket.

Winderman Ted Bertram is a community man. He is one of those energetic chaps who lead War Bond Drives, who is busy every night with one or other fraternal or community activity. If there is a special community promotion job—Ted is always called in. One night recently he was discovered at home—to the astonishment of the town and the amazement of his wife.

Machine Tender Alec Morris is an outdoor man. He is one of those fellows who scour the province for big game. He has shot moose, deer and bear in all corners of British Columbia and has fished every well known stream. He has climbed mountains after the whiskered Billy, shot ducks from a boat or outwaded pheasants or quail in every bush in the neighborhood.

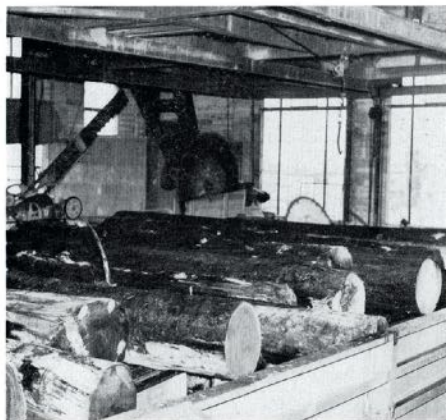
There you have them, the men who make Your Paper—at work and at play—a team by day—individualists by night.



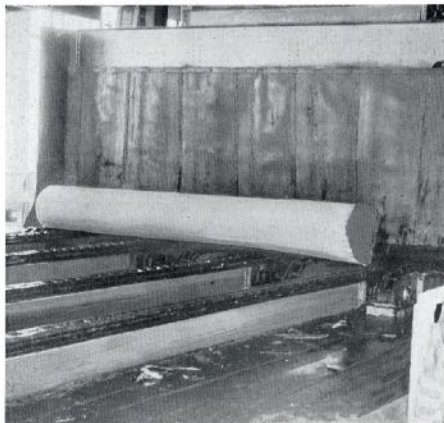
Alec Morris



Ted Bertram



Logs entering barker.



The first barked log.

New Stripper makes Debut

In the control room, President Harold S. Foley, surrounded by executive and operating officials, grasped the "Stick". Electricians, engineers, mechanics made final inspection of equipment. The big bark-encased log rolled slowly off the conveyor as an air of tenseness gripped the spectators.

Slowly the log moved forward, disappeared behind the "curtain" that encloses the spectacular machinery that in a mere thirty seconds blasts a hundred years' growth of thick, tight-fitting bark from the huge log.

Wood Superintendent, Howard Jamieson, standing near the controls, slowly raised his hand, turned to Mr. Foley, shouted, with scarcely concealed excitement . . .

"Let her go!"

The President rammed home the levers—a roar like a rushing express train followed, a deluge of bark spattered against the heavy bullet-proof glass window of the control room—and Powell River's first hydraulic barked log rolled lazily out from behind a second curtain.

Everyone rushed around to see the log that made barking history in Powell River. Smiles broke out as its glistening barkless surface, bare as a Colorado plain, came into view.

The day for which all of us had been eagerly awaiting was here. The hydraulic barker, long projected, and, after several unavoidable setbacks, now installed, was in operation. Another milestone in Powell River history had been passed.

Powell River is one of the few plants in the world to install this method of hydraulic wood-barking. It is still

comparatively rare in the paper mills of this continent; and the only one in British Columbia.

The actual barking operation is a wild melee of orderly confusion. Crocodile-jawed clamps seize the log in their maw, hold it tightly and rotate it. Instantly, the travelling carriage, connected by flexible rubber hose to great pumps, springs into action. Whipping back and forth with lightning speed, the jet of water, funnelled through a $\frac{3}{8}$ -inch nozzle at a pressure of 1,200 pounds to the square inch, rips the bark off faster than Gypsy Rose Lee in her best act.

The Hydraulic Barker installation is part of the Powell River Company's post-war improvement and development program. The Chipper plant, with which it is immediately connected, is being erected rapidly and will soon be ready for its trial run. Meantime, engineers and operating staffs are working the "bugs" out of this new equipment. Considerable trial and experimentation is necessary before the hydraulic plant is operating at capacity—but the kinks are being straightened out. It is a tribute to our operating crews that, during this installation, capacity newsprint production schedules are being maintained.

Most important at the moment is that at least 10 per cent wood conservation will result from this modern barking method. In addition to the saving of wood, a better job is accomplished. The new hydraulic barker more efficiently removes even the smallest particles of bark, which was difficult to do by the past barking practices. The previous operation called for individual treatment of each block and this caused a considerable amount of splinters. The elimination of these splinters helps to make a more uniform product.

HOW PULP AND PAPER CAME TO BRITISH COLUMBIA



The original Albern Mill erected on the Somass River, Albern, in 1891.

At the beginning of the twentieth century the pulp and paper industry of Canada still wore its swaddling clothes. A few visionaries perhaps caught a glimpse of what the future had in store, but generally, this was a new industry, and of doubtful prospects.

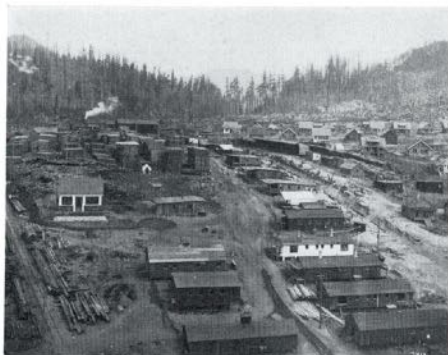
The turn of the present century saw the pulp and paper industry starting on its long climb to manhood. The use of wood pulp for stock about 1860 had opened up a new vista of possibility for Canada. In the Maritimes, in Quebec and Ontario and in British Columbia, billions of dollars' worth of potential pulp timber lay at hand in the vast reaches of virgin spruce, hemlock, larch, pine, fir, balsam, etc. But as the late Dr. Dwight F. Brooks, one of the founders of the Powell River Company, said, "Butter without bread is useless". The finest timber in the world was at our disposal but means to develop it, and indeed, demand for its use, were lacking. The great forests of the United States, with their comparatively huge populations, had not yet approached the full meridian of their productive powers; those of Canada had, as yet, no clear cut conception of the greatness that was to be theirs two decades later. The Canadian domestic demand was slight, and the U.S. with cheaper manufacturing methods, with greater capital and population, and a still abundant reserve of pulpwood timber, easily supplied their own markets. Following the American Civil War came an increase in the demand for newsprint and manufacturers began to cast about for new sources of supply.

Before this period, isolated attempts had been made to use wood pulp for wood stock. As early as 1826, Italian paper makers had successfully used the bark of the poplar and willow. In 1833, an Englishman had been granted a patent for making paper and pasteboard from wood, and in 1855 another patent was granted in England for the manufacture of paper from pulp.

In 1870, there was not a single pulp and paper mill listed on the census of Canadian industries. Already the annual value of paper products had reached \$50,000,000 in the United States; by 1890 this had been increased to \$70,000,000. At this date, Canadian mills had begun to function and the annual output of Canadian mills was slightly in excess of \$1,000,000. It was at this period that the Albern venture brought British Columbia into the paper making spotlight.

The actual history of the pulp and paper industry in B. C. dates back to the year 1891. A company, known as the British Columbia Paper Manufacturing Company, financed by British capital, and directed largely from London, started at Port Albern on Vancouver Island, the first known paper mill in the province.

This enterprise has no real significance in the subsequent history of the industry. It was an ill-timed and ill-conceived venture. The machinery was all old second-class equipment that had outlived its usefulness, in a British rag mill. Rags, at this particular period in B. C. history,



*A study in contrasts.
Left is Powell River in 1910. Right is Powell River today, a flourishing district of 9,000 people, all dependent on the output of one of Canada's largest newsprint plants.*

did not grow on trees; and, although established in the midst of one of the finest stands of softwood timber in the world, the plant was starved for stock. Lack of experience in paper mill construction was evident and even given a steady demand, a steady output was impossible. Inexperience, lack of organization, high operative costs, unsettled political conditions, all contributed to write finis to this first hesitant and awkward embarkation of the pulp and paper industry into the not placid waters of B. C.'s industrial and political life in the nineties. The Alberni enterprise operated spasmodically for less than three years.

The real history of the industry in British Columbia dates back to 1901. In that year the Provincial Government, to encourage the introduction of pulp and paper manufacturing in the province, granted, on liberal terms, what were called "pulp leases". These leases were let out to corporations who, in return for the privileges, agreed to commence development work within a stipulated period.

FIRST PULP SYNDICATE

Early in 1902, four companies, each of which was granted certain pulp limits, were formed. They were:

Canadian Industrial Co., who obtained 134,551 acres for their operations. This is the concession since taken over by the Powell River Company direct from the original syndicate.

Oriental Pulp & Paper Company, with 84,180 acres on what is known as the Swanson Bay Leases.

Bella Coola Development Co., 79,999 acres, now the Ocean Falls limits.

Quatsino Pulp & Paper Company, 55,869 acres, later taken over by the Whalen interests and later by B. C. Pulp & Paper.

The story of B. C.'s pulp and paper industry for ten years following the granting of the pulp leases is a confusing tale. The holding of leases, often for speculation rather than for actual development, was all too common. Although the leases stipulated a certain period for the commencement of operations, this condition was frequently

ignored by the lessees, and not enforced by the government for many years. Meanwhile, selling and re-selling of the leases took place; one syndicate, ostensibly formed for development, sold their rights to another, organized for the same purpose. Paper profits were taken, but no pulp mills erected. Some attempts at development there were, some exploitation of the pulp leases occurred, but until 1910 no definite progress was recorded.

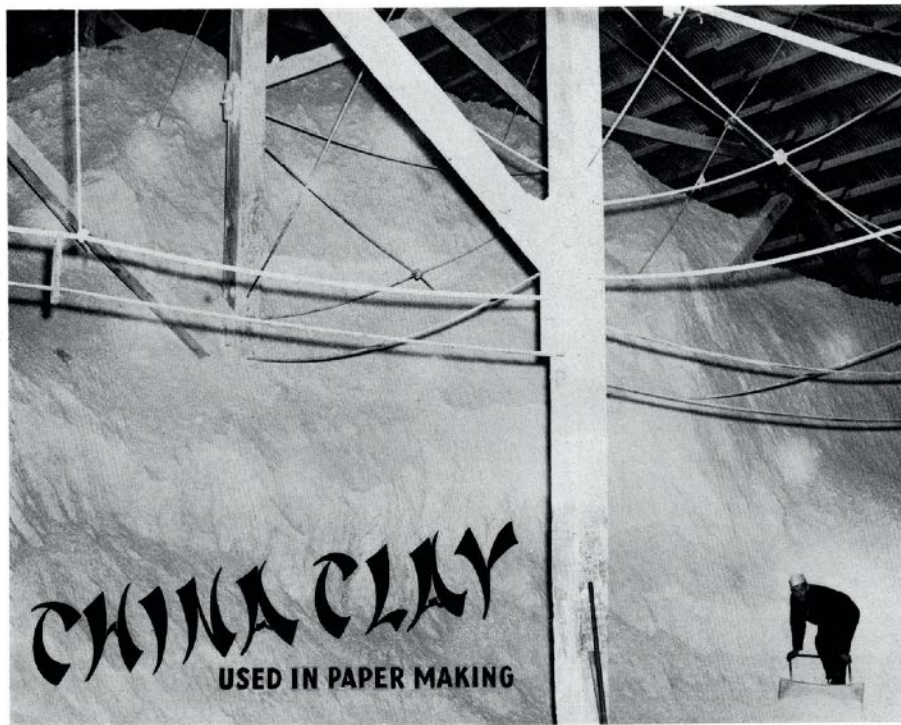
Space prohibits the detailed story of the ultimate disposition of the original pulp leases. There were spasmodic attempts at Port Mellon and Swanson Bay to start the manufacture of pulp prior to 1912—but results were largely negative.

The history of successful pulp and paper production in British Columbia starts with the Powell River Company, which turned out its first roll in April, 1912. Since that period, other newsprint and pulp firms have been placed in production.

Powell River Company can justly claim to be the newsprint pioneer of British Columbia.



All that is left of the first paper mill today. Old digesters, rusting away along the banks of the Somass, tell the tale of this unsuccessful venture.



By W. F. CRAMB
Beater Room Superintendent

The name China Clay suggests that this important earth, used extensively in the manufacture of paper products, is mined somewhere in China. One, with a little imagination, could picture sack after sack being carried down precarious hillsides or along slippery valleys by hundreds of sweating coolies.

But not so. China Clay is mined in its native state in many parts of the world—and that used in Powell River is abstracted from mines in Cornwall, England. This clay is of finest quality and best suited to our requirements.

On arriving at Powell River, the clay is unloaded from the hold of the ship, loaded into cars and transported to storage. This storage has a capacity of 6,000 tons. A heavy clay slurry is made in batch form. The first step in preparing a batch is to put the China Clay through a grid with one-inch openings, to break up the larger lumps and to allow faster mixing. On passing through the grid, it is carried by a bucket elevator to a hopper. The amount in

the hopper is governed by the required consistency of the heavy slurry. The clay in the hopper is then emptied into a mixer containing water, where propeller agitation brings it to a slurry. It is then dumped to a storage tank, where it is circulated by a pump, over a 60-mesh wire screen, to remove dirt or foreign matter that may have been in the clay. The heavy slurry is then pumped to a metering box, where the amount required by the paper machine is metered through an orifice and again screened. After this screening, the clay goes to storage tanks and is mixed with water, to reduce it to a light slurry, which can be handled more efficiently. The light slurry is then pumped to the showers on the paper machine and sprayed on the wet sheet of paper.

Newsprint is not the only paper in which China Clay is used. It is used in the manufacture of many other types of papers in varying amounts, to improve brightness, smoothness and printing qualities.



They came

FROM FARTHEST NORTH AND DEEPEST SOUTH

Visitors from the top and bottom of the world were among our recent guests. Recently, Messrs. Arne Flygt and John Sten, of the Swedish Pulp Company, dropped in for several days, following an extensive tour of American and Canadian pulp and paper plants.

Mr. Flygt, a former R.A.F. officer, is stationed in England as representative of the big Swedish firm whose plants produce approximately one-third of Sweden's pulp. Mr. Sten is located in Stockholm and both were making their first trip to this continent.

Our visitors could see no immediate prospects for much reduction in the world newsprint shortage. In the past ten years, as a result of steadily increasing literacy, there has been built up a tremendous demand for newsprint and paper products in Russia, in the Orient and throughout Europe.

Mr. Flygt stated that in general, Canadian and American mills were more advanced in modern equipment and machinery than their counterparts in Scandinavia. His observations on Finland were particularly interesting.

Mr. Sten and Mr. Flygt have been away from Europe since November. Both visitors were delighted with our scenery and the cleanliness and well-kept appearance of our plant and community.

Another interesting and welcome visitor from Australia was Mr. D. S. Sherman, general manager of the *Brisbane Courier-Mail*, Brisbane, Australia.

Mr. Sherman remarked, "The clamor for more newsprint is on a parallel with that on this continent—and in Europe. We appreciate that there is just not enough newsprint to go round and there is little that may be done about it for some time.

"We realize something of what you people on the selling end are facing in these days of unprecedented demand, and we consider you are being fair and equitable in the distribution of your products."

Mr. Sherman came to Powell River via New York. One main reason for his trip to this continent was to establish fresh news contacts, particularly on the Pacific Coast.

"Your problems and ours are very similar," he declared. "As Pacific nations we share the same responsibilities—and should know more about each other.

"Your Pacific seaboard is only a few days away—and with the expanded aerial transportation now in operation, we expect a speeding up in our contacts with each other."

Our Australian visitor, as a former cricketer, followed the recent test matches with deep interest. The English team, he felt, was poorly balanced. Their bowling was mediocre; and few of their batsmen packed the power of Bradman and Co.

"Test match play in Australia," Mr. Sherman stated, "is a deadly serious business—and Australian elevens go all out to defeat England."

Another interesting sideline on sporting activities in Australia was the interest taken in baseball since the game was introduced by American troops during the war. There are many youngsters playing softball — and "perhaps," twinkled Mr. Sherman, "we may produce a Babe Ruth of our own one of these days."

Australians were bitterly disappointed over the showing of their representatives on the Davis Cup games, but gave full credit to Kramer and Shroeder for their victories.

Mr. Sherman will return to Australia via San Francisco by air.



Bales of high grade unbleached sulphite pulp ready for shipment at Powell River.

POWELL RIVER

Strong

UNBLEACHED SULPHITE PULP

"Alike as two peas in a pod". Nature is remarkable for her ability to grow plants, fruit and animals true to type. However, much as they look alike at first glance, the two peas in a pod are different not only in size but in other respects. Man can, because of his technical development, take the products of nature and make them into articles identically alike one to another. An example is wood pulp.

At Powell River, wood of assorted characteristics, because of difference in species, age, location of growth, to mention a few reasons, is manufactured into wood pulp of a remarkable degree of uniformity. This is because of highly developed skill in manufacture, technical control and modern machinery. Shown in a marked degree are the results obtained at Powell River in its strong, unbleached sulphite pulp.

When one stands watching the steady procession of bales of Powell River pulp, an impression is gained of the regularity of manufacture. Each bale is exactly the same size and is packed identically with its fellows. Each bale has the distinctive Powell River die pressed into the wrapper. Each bale has been handled in the same manner as the one before it and the one to come. Here the similarity ends because the destinations and uses of the pulp vary greatly.

Powell River strong unbleached sulphite pulp goes to many places in the world. Its uniformity of strength,

color, bleachability, and other qualities, make it much in demand by paper makers. Also, because strong unbleached sulphite pulp blends well with other furnishes, it is used in making many grades of paper. One bale of Powell River unbleached sulphite pulp may go close to home, to paper mills in British Columbia where it is converted into fruit wrap, towels, tissues, building and box papers and boards. Another bale may go to far-off Tasmania, where it is mixed with groundwood pulp from eucalyptus wood to make Australian newsprint. Powell River pulp regularly goes to the eight states of California, Connecticut, Illinois, Michigan, Missouri, Minnesota, Ohio and Wisconsin. There it is used in a great variety of papers, ranging from light tissues, through printing papers to heavy container boards. There is such a world-wide demand that a bale might be included in a shipment for a foreign country, such as France, or it might be destined to stay within the Empire and go to the United Kingdom.

Almost every converting mill using Powell River pulp has a different method for its use. Rarely it is used wholly in the manufacture of a paper. Instead it is combined with other pulps such as soda pulp or groundwood pulp. It is even mixed with unbleached sulphite pulp of other makes to provide a desired formula which the combination of brands can give. A common practice is to use Powell River unbleached sulphite to obtain necessary long fibre strength when making products from waste paper.

Sportsmen Enjoy Good Season



Seasonal sports at Powell River have enjoyed a good season.

(1) Mary and Elizabeth Paul enjoy a swim on New Year's Day. (2) Basketball tip-off. (3) Open air skating (our first in four years). (4) Action on the soccer field. (5) Indoor bowling. (6) Volleyball grows in popularity. (7) Fast work on the badminton courts.

Mutual Co-Operation Not Paternalism

KEY TO SOUND EMPLOYEE RELATIONS

By FRANK FLETT
Employment Superintendent

I have been scheduled to address you tonight on the subject of "Employee Services".

Just what are Employee Services, and how do they fit into the over-all program of modern industry? It is essential that this be understood if the scope—and the limitations—of such services are to be studied in their proper perspective.

Modern industry has its origin in the Industrial Revolution in the eighteenth century. With the disappearance of the old hand craft workers, with the introduction of the machine and the concentration of workers in large factories, an entirely new set of conditions arose. With the Revolution came the four way partnership, Capital, Employee, Customer and Management, on which modern business is based, and without whose close co-operation industry cannot function.

It is imperative that this partnership be emphasized, because without it, no Employee Services program is possible. In the final analysis, your customer, and the regard in which he holds your product, conditions the employer's ability to provide these services.

Behind all the zeal of the reformer and the enthusiasm of the idealist lies one stark, cold-blooded reality.

Services Cost Money—and a satisfied customer is the only source from which it can be obtained.

At the outset, I would like to define as specifically as possible my conception of what Employee Services imply, and the objectives they should attain. I consider that Employee Services mean the services which an employer provides, assists in providing, or otherwise fosters, with the objective of increasing the happiness, well-being and efficiency of the employees who are associated with him in an industrial undertaking.

We cannot say that the idea of Employee Services is something new, something that has sprung full grown out of the complexities of modern industry. Even in the days of the Egyptian and Babylonian dynasties, the Pharaohs supplied their slaves with services of a sort—if only the bare necessities of a precarious and unhappy existence. Under the Romans, slaves were granted extended privileges. In the Ottoman Empire, Sultans recognized and rewarded the special talents of their Eunuchs. In the days of the Guilds, employers of apprentices took them into



Frank Flett

their houses, almost as members of their families, supplied them with food, lodging, clothing, and probably other services, in lieu of payment during the apprenticeship period.

In the nineteenth century, following the Industrial Revolution, money wages for services became the general practice in factory and mill, and employee welfare plans seldom entered the picture. The employee was paid for his services. There the employer's obligation ended.

With the twentieth century came a realization by more forward-looking firms that Employee Services had a place in sound employer-employee relations. The first three decades of this century witnessed a growing social consciousness on the part of the public and a more understanding approach by employers, to the problem of human relationships.

By 1929, the outlines of a definite pattern, still somewhat incoherent, still groping and uncertain, was beginning to appear. The great forward surge of the industrial tide in the hectic twenties, carrying with it mass production and the transference of industries to raw material or power sites, injected a more urgent tempo into employer-employee relations. Recreational, educational, and cultural activities, encouraged, assisted, or financed by employers, were becoming an integral part of industry's responsibility.

The Depression Period—the Hungry Thirties—saw many of these gains wiped out overnight, some through sheer inability of the employer to maintain them, others because of their imperfectly planned and slipshod conceptions.

This condition persisted up to the outbreak of war, while business was climbing back on its feet and slowly repairing the ravages of the depression.

An almost fantastic reversal of conditions appeared during the war years. Employee Services blossomed, bloomed and expanded in all directions. Many of these were hasty, even unhealthy expedients, which had no place in a sound, balanced program of normal employee relations. But those were not normal times, and with an enemy at our throats, with acute manpower shortages everywhere and production a "MUST", at whatever cost, there was little choice in the matter. They met an emergency—and

have undoubtedly quickened the pulse of post-war industrial relations.

Today Employee Services are an integral part of management planning and scientific study, with all the guide posts pointing the way to new and expanded conceptions in the years ahead.

The need for an Employee Services program springs from the basic human desire for security and happiness.

More and more are workers' welfare concessions sought by Unions in contractual agreements with Management. Labor leaders, with ears to the ground, are quick to sense the instinctive desire of their members for services that go beyond the cash-on-the-barrel basis; and which will provide security for himself and family.

That is why Pension Plans, Sickness and Health Benefits, Accident Prevention rules, etc., are looming so prominently on the modern labor conference agenda.

And, frankly, gentlemen, I don't like it. If employees, through their Unions have to bargain at the conference table for each and every welfare concession, it denotes a sad limitation of managerial vision. An employer who neglects his Employee Services program to the point where it finally becomes a matter for collective bargaining, is doing no service to himself, or to the system of private enterprise, which he represents. It is my firm conviction—and I may add, my experience—that matters of this kind can be solved more equitably, more harmoniously, if worked out on the first initiative of the employer, following well planned and mature consideration. Why wait until they have been incorporated as Union demands and pressed on you under the stress, hurry and possible irritations of the conference table.

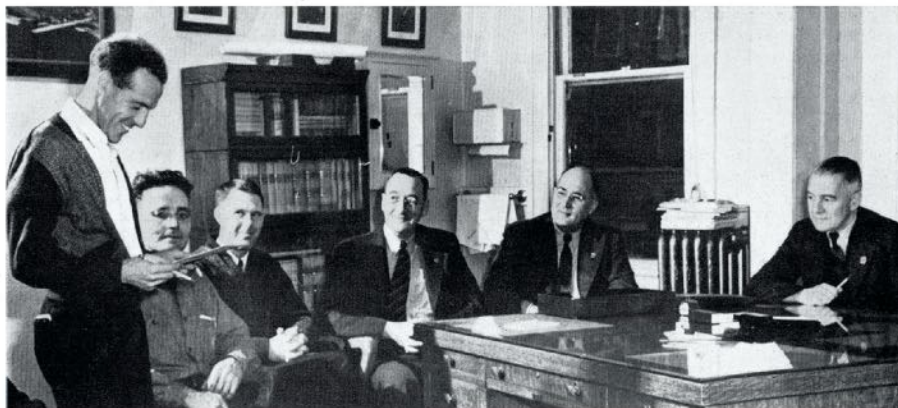
The development of a successful welfare program demands mature consideration, balanced judgment, and analytic forethought. In the multitude of angles that must

be considered, weighed and balanced, lurk many a pitfall for the unwary or the single tracked enthusiast. Probably the greatest menace confronting a firm is the bugaboo of Paternalism. And spell it with a capital P because it is a key word in this matter of Employee Services. It can drown in dismal failure the most generous and sincerely conceived welfare plan. It can boomerang back and reap ill will when nothing but good will had been sown. It may look like an orchid to the employer. Too often, it appears as a cabbage to the employees. All of you can recall an instance of an employer who has conferred a really generous and honestly presented gift to his employees. It might have been a community hall, a swimming pool, a library, a recreation room. Yet in a short time it becomes evident that it is not appreciated and soon falls into disuse. He may, and not infrequently is, criticized and even lampooned for his well meant donation.

Strange? Not at all. There are reasons for this apparent ingratitude of the worker; and they all focus on the everyday characteristics of people in general and industrial employees, in particular. None of us like being under an obligation to anyone and employees feel the same way toward their employer. The worker, conscious of his industrial role, has a sense of dignity which is easily offended by any taint of charity, however well intended. He has an inborn aversion to gift horses, and most employees will subscribe to the old truism that nothing is appreciated unless it is earned or worth while unless you have shared in its creation.

Such sentiments or feelings are based on good, sound character traits—a sturdy independence of spirit. Be careful not to destroy this spirit. It should be carefully fostered, and is a priceless asset to industry in these days when the attitude of something-for-nothing is so prevalent, and thousands sit back "waiting for the government to do it".

Union-Management committee at Powell River discuss problems frankly around the conference table. Standing is Tom Waldron, President of the Paper Makers' Local, with Resident Manager D. A. Evans and other company and union officials in attendance.





"POWELL STORES" modern building.



Prompt and courteous service at the Fountain.



Attractive fruit and vegetable displays.

POWELL STORES

A COMMUNITY

One of the most modern and best appointed stores in the province. Basic wage rates on the highest scale in Canada. A community minded organization that gives as well as takes.

These are some of the reasons why visitors, looking us over for the first time, express surprise, even astonishment, when they catch a first glimpse of the impressive, modern Powell Stores.

Powell Stores with its 90 odd employees is the focus for shopping activities of Powell River and district. On a per capita basis its annual turnover compares with the larger metropolitan stores. Designed by C. B. K. Van Norman, prominent Canadian architect, its appointments and facilities are up to the minute and in line with modern merchandising practise.

Prices are moderate. No local housewife can "beat the game" by sending orders to Vancouver department stores. It is as cheap to buy locally as it is to pay freight charges from Vancouver.

Approximately 110,000 sales are made each month—a large volume, considering the extensive competition from other business houses in the area.

The Cash and Carry section is a popular feature of Powell Stores service to the public. Prices average about ten per cent below those of general counter service; and the public have made full use of this facility.

The demand for quality goods is high in Powell River. Mr. A. H. Florence, store manager, states that with the "high local wage scale and steady employment", quality,



Crowds throng the popular "Cash and Carry" section.

RES LIMITED

ORGANIZATION

more than price, has dominated the Powell River shoppers' buying psychology.

All merchandise for local consumption is imported through Vancouver—with Canada, Great Britain, and the United States the principal sources of supply.

The employment policy of Powell Stores affords preference to local residents and to sons or daughters of employees. The wage scale is today the highest in Canada, a factor attracting many local girls to its counters, and resulting in a long waiting application list from outside areas. Store employees enjoy a 7½-hour day and a 5-day week.

Powell Stores is a leader in District Community Service. It supports athletic teams in every branch of service. It assists in advertising and no community or national appeal ever passes unheeded. It makes extensive contributions to prizes and awards to numerous organizations.

Recently an athletic organization was experiencing difficulty in obtaining public support. Clearly some new or novel promotion plan was necessary to lure spectators to the games. Powell Stores jumped into the breach with an immediate offer of a couple of pairs of "hard to get" nylons—and the next game, a thriller, was played before a capacity audience. This judicious and thoughtful gesture proved the necessary "pump primer". Attendance records soared for the balance of the season.

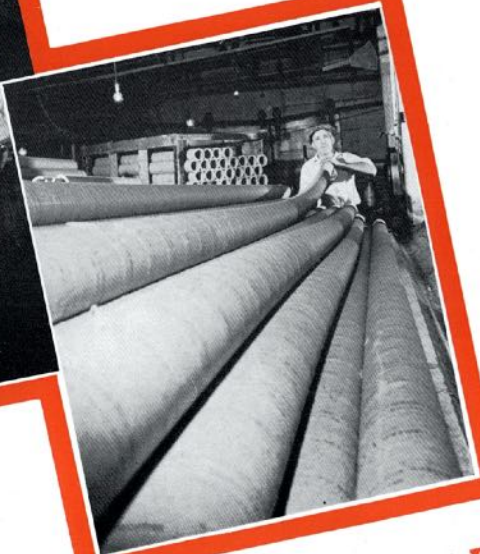
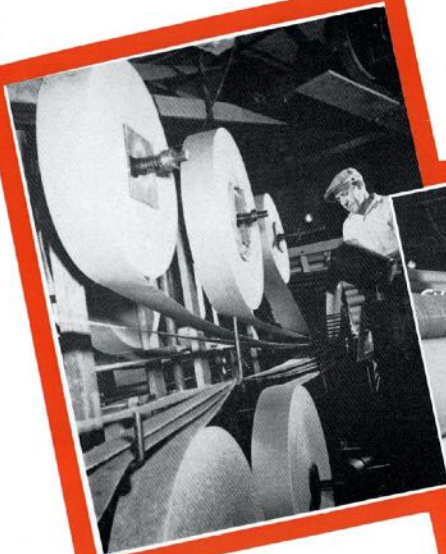
In this and in many other ways, Powell Stores has pulled its weight in the community which it serves.



Specially trained salesgirls attend to customers' individual requirements.



Pleasant surroundings, latest styles and quality merchandise.



CORES

The Heart of a Newsprint Roll

A comparatively unknown phase of paper production is the manufacture of newsprint cores—the heart of the paper roll.

Core stock is manufactured on a special run on one of the paper machines; and comes off in large sized rolls. These rolls are cut up on a rewinder, into smaller rolls, 4 inches wide and 30 inches in diameter. They are now ready for the core-making process.

The small rolls are placed on spools and from 20 to 25 are used normally on the average core. The unwinding strips are run through a bath of specially prepared glue, and finally meet one on top of the other on a moving steel shaft. The strips are kept tight by belts running over the outside bands, to ensure good adhesion.

The cores come out of the machine into a trough which keeps them running straight for 72 feet, when they are automatically stopped and cut off.

These cores are piled in a rack holding about 300 finished lengths. They are thoroughly dried by the continuous

circulation of warm air. They are rotated daily, care being taken to use the older cores first.

The long 72-foot cores are cut into exact lengths of newsprint rolls by a "core cutter", with a specially ground saw, which makes a clean cut, free of ragged edges.

The cores, which vary in length from 10 to 76 inches, dependent on the newsprint roll size, cannot be cut more than 24 hours in advance. The moisture in the air would shrink or swell them as much as a quarter of an inch.

Two grades of cores are manufactured at Powell River—the standard core, used generally—and the heavy grade, on the ends of which are placed metal tips for certain export orders. Samples are taken regularly for laboratory tests to insure a uniform product.

One interesting final use for Powell River cores was invented in the Southwestern United States. There, people have made summer houses from them and, with a weather-proofing, they look like log cabins and are very serviceable.



For more years than any living person can remember, this totem pole, which, prior to its erection in Stanley Park on the shores of Vancouver Harbour, daily looked down on the household of the TSA-WEE-NOX people of Kingcome Inlet in Northern British Columbia. Today this same totem keeps a watchful eye on the behaviour of the Kingcome Navigation Company tugs towing scowloads of Powell River products into Vancouver Harbour for transshipment to all parts of the world.



Strength

Paul Bunyan efficiently cleared the land. When he logged North Dakota, it was covered with large trees. He got rid of the huge stumps by pounding each one into the earth with a terrific blow of his strong fist.

The strength of Powell River newsprint is highly regarded by pressmen throughout the world. Its unvarying strength ensures long press runs without a break.



POWELL RIVER NEWSPRINT

Powell River

DIGESTER





Powell River
DIGESTER

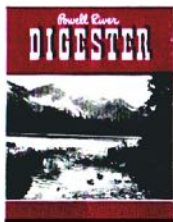
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POWELL RIVER COMPANY LTD.

Standard Building
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Editor
J. A. Lundie

Staff Photographer
O. J. Stevenson

Through the pages of this journal we hope to tell our readers about Powell River and its products.



The Cover Picture

Staff photographer Oswald Stevenson provides a rare portrait of picturesque, lily-topped Durance Lake, nestling high in the hills back of Powell Lake.

Durance Lake is comparatively unknown, even to local residents, but it is one of the beauty spots of the district.



Still Going Strong

John McIntyre can count his friends by the thousands in Powell River and in many and extended parts of the globe. There is scarcely a publisher using Powell River newsprint who doesn't know John. There is scarcely a guest of the company who hasn't felt the impact of John's charm, inimitable humor and hospitality. He loves people and people love John. He is an institution in Powell River. He is Powell River—and no one has done more to boost his home town than John McIntyre.

In 1944 Powell River elected its first "Good Citizen". Applications were requested from all community bodies, Boards of Trade and other societies.

Every organization submitted the same candidate. There was no opposition. The choice was unanimous and was hailed with approval in every corner of the district.

Powell River's first Good Citizen was John McIntyre, easily the most popular and best known man in town.

John was born in Stanrae, Scotland, and came to Canada in 1910. He was educated in Edinburgh and attended the Edinburgh College of Applied Art and as a graduate of Heriot-Watt College. Prior to migrating westward he practiced his profession as an architect in Edinburgh.

From 1910 to 1915 John had his own business in Vancouver. He joined the Powell River Company in 1915, and from 1919 to 1935 was Townsite Manager at Powell

River. He designed and built the major part of the Powell River townsite and public buildings in the district.

Most of the public buildings in Powell River are houses that John built. The Community Centre, Dwight Hall, one of the most elaborate of its kind in British Columbia; the picturesque War Memorial site; the Brooks School; Golf Club House, and Bank of Montreal, are living testimonials of his professional skill. Industrial buildings have come within his sweep, and the white outlines of the Stillwater Power House, a work of art as well as of industry, represents another of his creations. Only recently the McIntyre touch has been revived in the new Hydraulic Barker Building. John's hand and mind have lost none of their cunning.

For the past ten years John McIntyre has handled the Public Relations Division at Powell River, in which time he has met practically every guest who has visited our town.

He has Powell River in his blood—and is himself one of the best advertisements for Powell River. His popularity with the fair sex is something that most of the male population prefer to overlook—because they, too, can't resist John.

So, to our many friends in all corners of the world, we give you an old friend and Powell River's "best citizen", John McIntyre.

Our Plans for Sustained Yield Forestry

By J. E. LIERSCH, Forest Engineer



A logged over area.

To many readers, especially in the United States, where forestry has progressed by leaps and bounds during the last fifteen years, it may seem somewhat incongruous that a company such as ours, producing newsprint for 35 years, and entirely dependent on wood for its existence, has not before this time made known its long-term forestry plans. There are two main factors which have dictated the policy in the past. These are, first, the relative ease with which mature timber could be acquired through purchase, and second, the policy of land and timber tenure as set down by the British Columbia Government.

The acquisition of mature timber through purchase has become increasingly more difficult and more expensive during the past five years. It has been brought about by the realization, on the part of most producing companies, of the fact that privately held timber in the coastal region of British Columbia was very definitely limited in amount; and also by the fact that the forest industries generally have experienced a period of unprecedented prosperity during and subsequent to the war years. There has also been a concentration of available privately held timber in the hands of a few large operating companies who have taken this means of assuring as long a future as possible for their operations.

The second factor of government policy with reference to forest land tenure has been by far the greatest deterrent to the practice of private forestry in British Columbia. The basic policy in the past has been that practically all the forest land in the province be retained in the hands of the government. At the present time the government owns outright 90 per cent of the forest land of the province, leaving only 10 per cent of the acreage alienated in the form of fee simple lands. It is true that 15 per cent of the acreage, in addition to 10 per cent in fee simple lands, is at present held privately under timber licences,

timber leases, pulp licences and pulp leases, which give the owner the right, under the conditions set forth, to remove the present mature timber standing on the licence or lease. The land on which the timber is growing still remains the property of the government, and upon the timber being removed it automatically reverts to the government.

Under these last mentioned forms of tenure it may be readily seen that there is no incentive for a private operator to try to practise forestry on such lands because he has no assurance that he will be allowed to harvest the crop on those lands if and when it matures.

Three years ago the government, realizing the seriousness of the forest problem in British Columbia, and also the practical impossibility of efficiently administering the vast acreage of timber lands in the province single handed, established a Royal Commission to look into the problem and make definite recommendations for its solution. The commission thus appointed, under the chairmanship of Gordon McG. Sloan, Chief Justice of British Columbia, sat for 111 days, conducted hearings throughout British Columbia, received the sworn testimony of 293 witnesses representing government, industry and the public generally, covering 10,700 pages of transcript. As a result of this enquiry the Chief Justice presented his very excellent report and recommendations to the Legislature in December, 1945. The government considered his report for a year, and in February of this year passed legislation implementing most of the Chief Justice's important recommendations.

The two most important points covered in this new legislation, as far as private industry is concerned, are:

- (1) Provision for permanent tenure on enough forest land to assure a perpetual supply of timber for the conversion plant at a nominal annual rental of one cent per acre, and,
- (2) provision for a yield tax of 16 per cent of the stumpage value of the second and subsequent crops of timber, payable to the government when it is cut.

WHAT NEW LEGISLATION MEANS TO POWELL RIVER COMPANY

This new legislation will make it possible for the Powell River Company Limited to plan definitely on sustained yield management of their timber resources. As pointed out in the last issue of the *DIGESTER* by Mr. George W. O'Brien the company has, under various forms of tenure, a supply of mature timber sufficient to operate the plant for about 40 years. This is not enough timber, however, to fill in the gap between now and the time the present second growth on company lands reaches maturity. The government is now prepared to add to the presently held timber lands of the company enough mature and second

growth timber from their vast holdings to assure a perpetual supply of raw material for all time to come.

All the provisions of the co-operative agreement between the company and the government will be incorporated in a "management licence contract" covering the lands finally allocated to the company. But in order to secure one of these management licence contracts, and in consideration of the fact that the government is prepared to allocate certain lands for the sole use of the company, we in our turn must be prepared to undertake certain obligations in the management of these lands. It is felt that none of these obligations will prove onerous on any company who is wholeheartedly in favor of perpetuating the life of their industry. The Powell River Company Limited particularly has been most anxious for many years to work out a sustained yield policy, and it is now possible to do so. We are prepared gladly to accept our responsibilities in this matter and to carry out in a spirit of co-operation for the mutual benefit of the company and the people of British Columbia, all provisions of any management licence contract signed with the government.

The main provision of these contracts will be the preparation and submission of a working plan covering the licensed area for the approval of the Provincial Forest Service. Once this approval has been granted, then the responsibility of the company lies in the carrying out of all the provisions of the management plan.

FACTORS TO BE INCORPORATED IN THE MANAGEMENT PLAN

The main features to be covered in the management plan will be:

- (1) Statement of mature timber in area by volume and species.
- (2) Statement as to extent and distribution of age classes of second-growth timber.
- (3) Determination of factors of site quality, degree of stocking and growth capacities of these second growth stands.
- (4) Preparation of detailed topographic, forest cover and logging maps of the areas.
- (5) A definite logging plan to be followed for the next five to ten years. This plan will show main developments, logging methods to be used, where the cuts will be made, and other information designed to assure natural regeneration after logging; degree of utilization of wood, cutting budgets to remove over-mature and diseased stands as quickly as possible, etc.
- (6) Fire protection plans and organization.

Needless to say, such plans will take many years to prepare in detail, and it will be at least

a period of one rotation (80 years) before the forest will reach a fully regulated condition.

It is our belief, however, that the government fully realizes the difficulties attendant upon preparation of such working plans, and are prepared to meet industry half way in working out these problems, meanwhile assuring industry of enough forest land to maintain a perpetual supply of raw material for its conversion plants.

The Powell River Company Limited has anticipated this legislation to a certain extent and for the past year has been laying the groundwork for entering into a co-operative agreement with government by carrying out forest surveys in areas under their control where the second crop has already been established. The results of these surveys have been very encouraging. The company is 100 per cent behind a policy of sustained yield management of its forest resources, and willing and eager to live up to any reasonable obligations imposed by government to bring about this end.

Canada has 813,110 square miles of forest land. In addition, there are 477,850 square miles of inaccessible or unproductive forest land.

* * *

Counting forest and jungle of all kinds, Canada has eight per cent of the world's forested area.

* * *

Of Canada's own area, 38 per cent is forested.

* * *

Forests are among our five main natural resources. The others are farm land, mineral areas, water-power and fisheries.

* * *

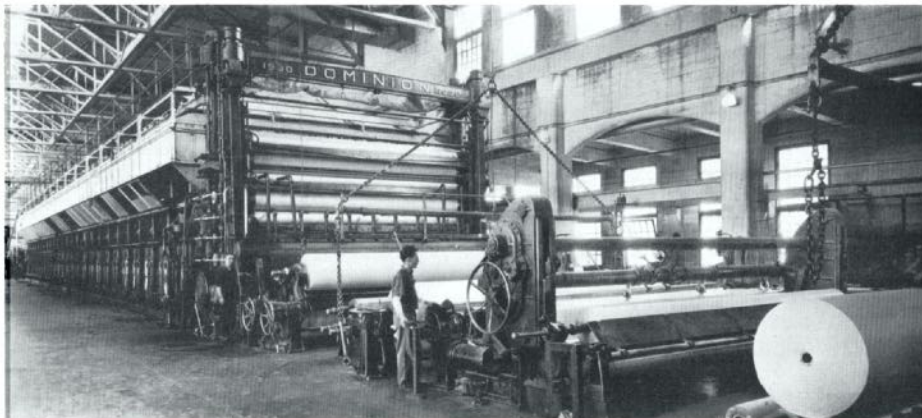
More than 92 per cent of Canada's total forest land is owned by the Crown, or, in other words, by the people.



A 15-year hemlock stand.



Growing timber.



Programming Our Paper Machines

By ANGUS D. ARMOUR

Hour after hour the huge paper making machines at Powell River are rolling, producing high quality newsprint. This remarkable machinery never stops, day or night. Every roll of Powell River newsprint is carefully made to the specified requirements of the individual users, and a great deal of planning ahead is necessary to meet these varied requirements and yet be on schedule with shipments.

In the efficient operation of a modern newsprint mill, one of the primary factors is the exacting business of programming the runs of the individual machines. Programming calls for skilfully arranging for the manufacture of roll size combinations in the same diameter, so that the maximum production can be obtained from each paper making machine and at the same time have the paper ready for a given shipping date.

At the present time the Powell River mill has seven newsprint machines, with the following maximum trims applying to each machine (the width of the sheet as it comes off the machine is called "the trim" in paper mill slang):

No. 1	Machine.....	140 inches
No. 2	"	145 "
No. 3	"	175 "
No. 4	"	175 "
No. 5	"	221½ "
No. 6	"	221½ "
No. 7	"	214½ "

The maximum trims are nearly always constant although it is sometimes necessary, for short periods, to slightly reduce the trim of a machine just prior to changing to a new wire, where the pulp develops its formation, or to new felts, which carry the wet sheet to the driers. When the sheet of paper comes off the machine it is wound on a reel the full trim width of the machine. It is then re-wound, cutting to rolls of press sizes. When programming the paper machines the obvious objective is to fill out to

the maximum trim widths at all times so that production from the machines will be the maximum. An illustration of this would be programming Number 6 machine with three rolls 66½ inches and one roll 21½ inches for the trim width of 221 inches. By so planning only ½ inch would be returned to the beaters.

To help press rooms get the most efficient and economical operation we manufacture newsprint rolls in seven different diameters, each designed to fit one of the varied types of newspaper presses. These standard diameters are 28½, 30½, 32½, 34½, 35½ and 37½ inches.

When programming a machine all rolls of the complete reel must be of the same diameter for the full trim width, otherwise paper makers would have to adopt the practice of stripping some rolls down to the specified diameter or building rolls up to larger diameters, both of which are costly and inefficient and time wasting. It is easily noted that if users could standardize on fewer diameters the better the possibility would be of programming the orders to good advantage, filling the trims of the paper machines, and so producing more newsprint.

From time to time we are advised of newspapers changing their roll sizes, and these changes in the majority of cases are to narrower roll widths. This adds to the difficulty of keeping the paper machines trimmed to their maximum. It is interesting to note, on this score, that in the last ten years the reduction for many newspapers has been from 68 to 65 inches.

During this period of newsprint shortage we cannot stress too strongly how much we would appreciate users holding changes in original orders to a minimum, because the trimming of the paper machines must be done well in advance. This forward planning makes maximum production possible and helps to obviate shipping delays, because we are most anxious that Powell River newsprint users receive their paper without delays.



"River of Paper" is the apt title of the Powell River film depicting all phases of the manufacture of Powell River newsprint.

The continued interest shown in the picture has been most gratifying to us. It has now been continuously exhibited for two years. Over 680,000 people have seen it, a high number for an industrial picture. Extra copies have been found necessary, and at this time the film is busily booked near and far. A copy of the film is creating a waiting list among our neighbors in the Puget Sound area. The demand for it in California has been so great that we have supplied two copies, one for Northern California and one for the southern section of the state. We have found that in the southwestern states of Texas, Oklahoma and Arizona the picture would be shown to a group of our friends and immediately it would be demanded for repeat performances to schools, service clubs and hospitals. Because of this, another copy has been placed there and it is still going strong. Another film is continually travelling in Eastern United States. Paper makers in Eastern Canada have been interested in technique used in British Columbia manufacture of newsprint, particularly regarding the logging operations which are so excellently featured in "River of Paper", so it is distributed to that section of the country by still another copy of the picture from Montreal. The people of British Columbia are keen to know more of the paper making industry because of its importance in the industrial life of the province, so requests for it have not diminished since its release two years ago. The film has also journeyed to other parts of the world. It has just returned from a most successful tour of Australia and New Zealand, and audiences "down under" were loud in their praises. This copy is now on the way to Philippine Islands. The picture is also being presently shown in England, and gratifying reports are coming of receptions it has received there.

The absorbing story of how newsprint is made from giant trees is one that catches the imagination and holds the interest from first to last. When it is remembered that pulp and paper production is Canada's greatest manufacturing industry (with a \$70,000,000 investment in British Columbia alone) this film stands out as an educational and entertainment feature of importance. It is the story of the Powell River Company Limited of British Columbia, which operates one of the largest newsprint

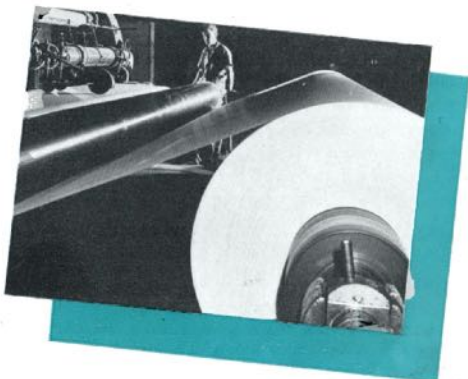
mills in the world. "River of Paper" rates as a top-flight industrial motion picture.

It's a first class professional job, in beautiful Kodachrome, with running commentary by Gayne Whitman of Hollywood, sound effects and musical background. It's a fascinating half-hour show.

"River of Paper" shows actual lumberjacks at work in the forests of Queen Charlotte Islands in British Columbia; authentic scenes in logging camps, booming grounds and in the Powell River mill; it describes the process of pulp and paper making from beginning to end; it takes you on a tour of the town, into the homes and lives of the workers, showing the high calibre of working and living conditions.

The pulp and paper production of the Powell River Company Limited is one of the really basic industries of British Columbia, as well as an important operation when measured from the standpoint of all Canada. This company feels it a duty to the public at large to tell the story of this giant industry, as well as the valuable service rendered to the newspapers of the world and to the company's employees.

For complete information as to distribution and availability, you are cordially invited to write to this organization, whose story the motion picture "River of Paper" so graphically tells.



MORE POWER!



Original log crib dam erected in 1931.

Scanlon Dam Being Raised

In May, 1929, the Powell River Company applied for water rights in the Lois River watershed, 13 miles south of Powell River.

The British Columbia government granted the company's application in November, 1929, and a new era in plant construction commenced. Preliminary surveys had already been made in the territory and a program calling for the immediate installation of 22,000 horsepower was initiated.

The Lois River area had long been intimately associated with the Brooks-Scanlon interests—and consequently with Powell River. For over 20 years Brooks-Scanlon had conducted logging operations in the area and their operations here were among the largest in British Columbia.

The Lois River area was famous for the size and quality of the giant "sticks" that grew in this fertile soil. Their fame is world wide. From the Brooks-Scanlon tract at Lois River came the mighty 214-foot flagpole which today stands high above Kew Gardens in London, and which is one of the mightiest in the world; from the same concession was logged the staff which flies over Australia's Capitol at Canberra; in Vancouver courthouse is the 209-foot flagpole, the largest in British Columbia.

It was into this area, once the home of the logging locie, the yarders, buckers and fallers, that the Powell River Company entered in 1929 to start a new era in their plant construction history. It was the first time that power, other than that developed from Powell Lake, was utilized in company operations.

The lake system which was to be developed as a power source for a new industry was sometimes called the Gordon Pasha watershed. The three principal lakes are Lois, Gordon Pasha and Khartoum, the last two being named in honor of General Gordon, murdered at Khartoum, Egypt, in 1882.

North of the main chain lie the mountain reservoirs—Horseshoe, Nanton, Dodd, Lewis, Island and Windsor Lakes. Still further north are the smaller feeders. Carrying the water of the Horseshoe to the Gordon Pasha chain is picturesque Horseshoe River, rising from a glacier overtopping Jervis Inlet. In these upper reaches of the Pasha virgin timber still abounds and the rivers are famed for the size and fighting spirit of their trout. The Pasha area was a logger's dream and a hunter's and fisherman's paradise. It is still that, but today its resources have been extended, and by next year the watershed will supply approximately one-half of the power which sends Powell River products on their globe-circling journeys.

The Lois River project was to be built in successive stages. The first called for an initial installation of an 18,000 k.v.a. generator, with provision being made for future installation of a second similar unit.

The first lap of the journey was completed in 1931. This involved construction of a temporary log crib dam and construction of a 2½-mile stretch of pipe line and penstock. The temporary portion, which extended down stream for 2700 feet from the temporary to the permanent dam site, was a 10-foot wood stave structure. From this

point to the power house at Stillwater the installation was permanent. This construction included drilling a tunnel 5800 feet long through a wall of solid rock to accommodate the 12-foot, 6-inch concrete pipe line running from the permanent dam. Work on the tunnel was started from both ends, and so accurate were the engineers' calculations that the two shafts were less than half an inch out when they met in the centre of the tunnel.

From the tunnel a 2700-foot 12-foot, 6-inch diameter steel penstock carries the water direct to the power house at Lois River.

All this construction was completed in 1931, with the permanent dam site cleared and provision made for a second 18,000 k.v.a. unit in the newly erected power house at Stillwater. A feature of this construction was the erection of a huge 312-foot surge tank which today towers high above the surrounding country and is a landmark for ships plying up and down the coast.

In 1940 the temporary log crib dam was eliminated and work commenced on the major portion of the permanent concrete dam. This increased the head to 390 feet and provided additional power for the plant at Powell River. This dam was a variable arch type, and by October, 1941, the last yard of the 78,000 cubic yards of concrete was placed.

The new dam was named the Scanlon Dam in memory of the late M. J. Scanlon, a founder of the Powell River Company.

The second phase in the Lois development had now been completed.

In 1946, to keep pace with the growing demand for Powell River products, additional plant extension and renovation became necessary. At Powell River a hydraulic harking plant has been built, and more grinders, more motors, more of everything are calling for increased power capacity.

These demands bring us to the third phase in "Operations Lois". To obtain this new motive force it is necessary to raise the present dam another 20 feet and install the second 18,000 k.v.a. generator in the power house. The work is now progressing steadily and when completed early next year will give a maximum head of 421 feet at the dam and a storage capacity of 449,644 acre feet.

The height of the dam will be 201 feet from bed rock to crest. At the deepest point it will be 38 feet wide at the base and eight feet at the crest, with a crest length of 680 feet, and will contain over 90,000 cubic yards of concrete.

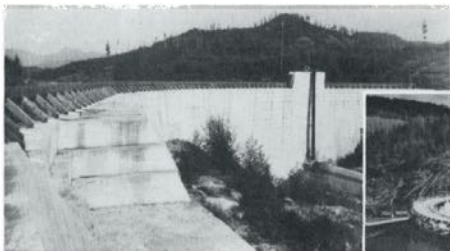
The second generator is now being assembled and both dam extensions and generator installation will be completed this fall.

By the middle of next year 44,000 horsepower will go singing over the 66,000-volt high tension wires that carry the white coal of Lois to the hungry maw of the big machines at Powell River.

At this time Powell River's power consumption will have been boosted to 94,000 horsepower, with 50,000 horsepower coming from Powell Lake and 44,000 from the old Gordon Pasha watershed.

The background to the present extension at Lois River is the installation of Powell River's eighth paper machine, which will enter production in the summer of 1948. The new machine will be one of the most modern and best equipped in the world, and will assist in relieving the general world shortage of newsprint.

And thus the "Gordon Pashas", who started out in the "wood business" in the early days of this century, are still in the "wood" business. Their waters bring life and security to the newsprint machines at Powell River; their vast stretches of timber, great areas of which remain unexplored, still resound to the shouts of "T-I-M-B-E-R" as logging operators, chief among which is the O'Brien Logging Company, continue to haul the giant firs, cedars, spruce and hemlock to tidewater for conversion to pulp and commercial lumber of all kinds.



Scanlon Dam in 1941.

New construction will raise Scanlon Dam 20 feet.



I like my fishing and I like it handy

By WALTER SNYDER, Paper Mill Superintendent

One of the most attractive features of Powell River to a large number of our sports-minded employees is their ability to enjoy the finest fishing right on their doorstep.

Powell River is situated on tide water about 80 miles north of Vancouver. The surrounding country has many lakes which are easily reached and abound in trout of two species, cutthroat and rainbow. Specimens up to 12 pounds have been caught, and four and five pounders are common. They are sporty fellows and provide the angler with lots of opportunity to display his fishing lore.

The closest and largest lake is Powell Lake, with Goat Lake adjoining it. These waters have a species of fish called kokanee, which are actually a landlocked sockeye salmon, and furnish the best of food for big trout. These kokanee school come up to spawn between August and November. This is the best fishing period of the year. The big trout, well fed and cocky, are ready to challenge the fisherman to a death duel. Real sport may be had in trolling with plugs. Flat fish Hedddons are the most popular.

There are numerous other lakes, including Haslam, Dodd, Horseshoe, the three Gordon Pashas, and many smaller lakes, all of which guarantee good fishing in the spring and throughout the season. Fly fishing has its devotees, but the most popular method is trolling and casting. Dozens of varieties of spoons and lures are used, dependent on the individual experience and superstition of the fisherman.

On many of our fall fishing trips we found our best fishing in the last hour of daylight—just as we were ready to head for home. After one such trip we decided that if the fish liked it that way we would spend the night with them next week.

All week we dreamed of catching monster trout by the light of the moon. On Thursday afternoon we hurried from work, full of enthusiasm to reach the fishing spot before dark. Our first problem was to clear a passageway

to shore, as the lake has been raised and was full of driftwood amongst the trees. After much pushing and grunting we finally made it. We then piled a lot of driftwood for a fire, and with the help of about a gallon of gasoline we had our fire. After this a nip of Mr. Kennedy's best and we started out to catch some record breakers.

But these Powell River trout are smart. They watched us building our fire, knew we were up to no good, and decided not to play. We did manage to catch a couple of five pounders apiece. With trolling and clearing land to replenish the fire we passed the night, our enthusiasm at a very low ebb. After a breakfast of bacon and eggs and cinders we started to fish again.

After a few hours of trolling with no action one of our party was reclining on the back seat when "Wham!" a six-pounder took his plug. Our friend is a fast lad on a ball field, but he beat all records in coming to life when that fish hit. With gratuitous advice from us he finally boated the fish, the best fish of the day or night.

So there you are. Fishing, like gold, is where and when you find it.

If you want trout fishing the Powell River area, with its score of lakes, large and small, is one of the best. And when it is emphasized that this fishing can be found almost a stone's throw from the plant it is a swell break for the employee who likes his fishing.

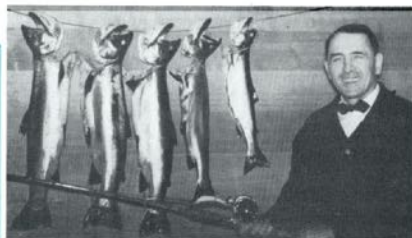
But lots of the fellows are not keen on trout fishing. They prefer the salt water variety—salmon and cod—and the thrills of hooking something better than six and seven pounders.

Well, if you want that, Powell River can supply it. In fact, one of the strongest organizations in the district are the salt water fishermen who haunt the company docks every night during spring and summer. Salmon from 15 to 25 pounds are not uncommon, and cod are plentiful. And if you have a gas boat you can carry on across the straits for almost 30 miles and meet the big 50-pound Tyees at Campbell River.

That's one reason why I wouldn't trade Powell River for any spot on the continent. I like both kinds of fishing—and I like it handy.



A 50-pound Tyeo, caught in waters near Powell River.



The author, Walter Snyder, with a catch of large cutthroat trout.

EMPLOYEES AND DEPENDANTS PROTECTED AGAINST SICKNESS

What is the most gnawing anxiety that has and to a large extent still confronts the average employee in industry?

Wages? Prices? Working conditions?

All of these to an extent—even more pressing has been worry and loss of means attendant on sickness to himself, and particularly to his dependants.

How often have a young couple started out in life full of ambition, enthusiasm and courage to be suddenly pulled up short by an illness to the wife or children. Followed long months of hospital, of doctor bills and medicinal costs—which too often have crippled the family for years, and which have taken the heart and ambition out of many a promising young man.

Powell River Company employees are free of this shadow. The Hospital and Sick Benefit Plan is imaginative and comprehensive and provides for complete hospital and sickness coverage for himself and his dependants.

Every employee, in case of sickness, is given free hospital and medical attention along with regular weekly benefits over a six-month period. His wife and family are completely covered—and maternity confinements or long illnesses of his wife are no longer the irritating and soul-destroying handicap they once were.

Here is an example:

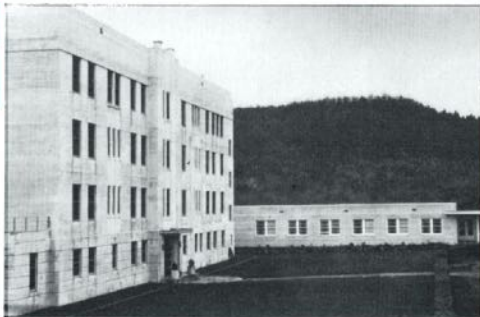
An employee's wife presented him with a brand new youngster. She was in hospital 14 days. The total cost, including the medical attention and doctor's fees for birth, was \$35.00. The amount is a fixed charge in all maternity cases.

In another case a new employee, a member of the Sick Benefit Society, sent his wife to hospital. A major operation and several months' convalescence in hospital followed. The total cost to the employee was the first three days in hospital and any special prescriptions.

Powell River's modern hospital has 64 beds, 12 bassinets and six cribs, under supervision of a qualified matron and a staff of 21 graduate nurses, one orderly, a competent technical staff, and a housekeeping staff of 10. Appointments and furnishings are up to the minute.

The new hospital was opened in July, 1942, at the initial cost of \$160,000.

The hospital site was deeded to the Society by the Powell River Company. The building was financed by the



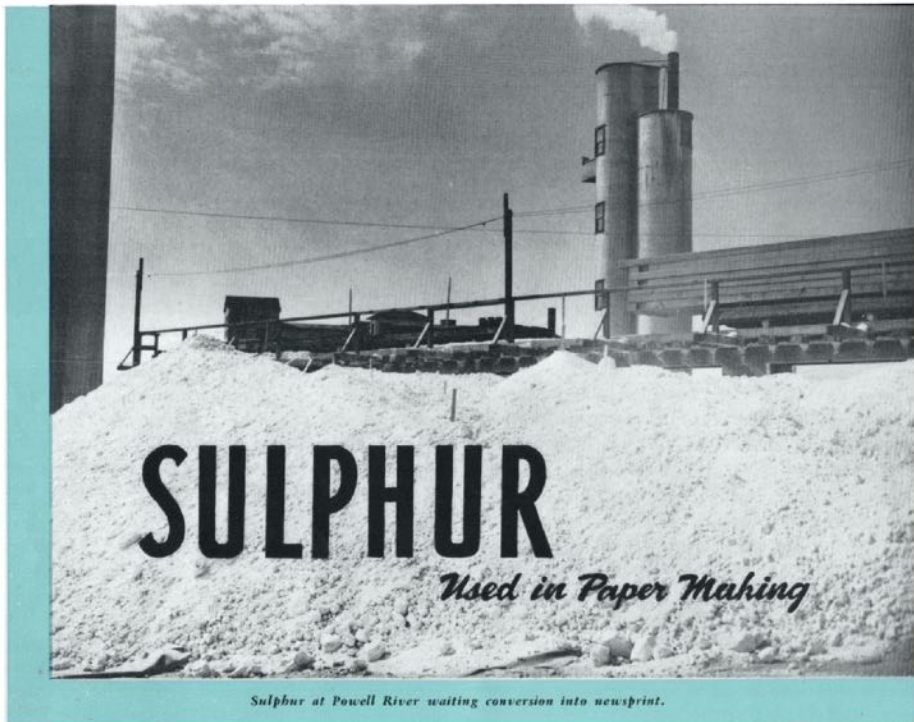
Powell River Hospital and Clinic.

Society's reserve fund of \$60,000, a surplus accumulated over a period of years which included annual grants from the Powell River Company, a further grant of \$25,000 from the Powell River Company, \$10,000 from the Provincial Government, and \$6000 from the Elks' Lodge. A loan of \$40,000 was obtained that has now been liquidated by special assessment and a later grant of \$15,000 from the Provincial Government.

The Powell River Company makes regular monthly donations to the Society. These approximate \$3000 monthly. There is a panel of five qualified doctors in regular attendance at the Clinic. In addition the Society has listed the services of two of British Columbia's best known specialists, Dr. Andrew Turnbull, M.D., radiologist, and Dr. W. L. Sloan, M.D., an authority on X-rays. These specialists make regular visits to Powell River to conduct certain specialized examinations and to consult with the medical staff.

Powell River employees are justly proud of their new hospital and of the protection which they and their families enjoy against sickness.





Sulphur at Powell River waiting conversion into newsprint.

By R. C. BLEDSOE, Sulphite Superintendent

Sulphur has been known since very early times. Reference to its use as early as 2000 B.C. has been found, and there is evidence that certain of its uses were understood by the Egyptians and other ancient civilizations.

The element is widely distributed over the earth's surface and recurs in many forms, both pure and in its many compounds. The sea contains enormous quantities of sulphur. As a source of sulphur, however, only a few of the metallic sulphides and the deposits of pure sulphur are of importance, and of these the deposits of pure sulphur are by far the most important. There are such deposits in Italy, Sicily, Japan, Chile and the Gulf Coast states of Texas and Louisiana. The last named supply practically all of the sulphur used on this continent and it is with them that we are chiefly concerned.

The method of mining these sulphur deposits is unique and interesting. The sulphur occurs in beds mixed with calcite rock at depths of 500 to 1000 feet. The mine is drilled in a manner similar to an oil well. Into the drill is introduced an arrangement of three concentric pipes extending to the bottom of the hole. Into the space between

the two larger pipes is pumped water under high pressure so that its temperature is above the melting point of sulphur. Into the small centre pipe is introduced compressed air. The hot water melts the sulphur underground and, since sulphur is heavier than water, it sinks to the bottom of the pool so formed. The pressure of the compressed air forces the molten sulphur up the annular space between the small centre pipe and the second largest pipe. The whole mechanism is kept hot by the descending water and the ascending sulphur remains molten until reaching the surface. This ingenious method was first proposed by Herman Frasch in 1891, but it took about ten years of patient experimenting to perfect the process.

In its common form sulphur is a crystalline substance of a bright yellow color, this latter attribute being so distinctive that the term "sulphur yellow" has become a common expression. It occurs normally in two forms, rhombic and monoclinic, which have slightly different physical properties. Sulphur is practically insoluble in water, is stable at ordinary temperature but melts readily at 113° C. to 119° C., and forms chemical compounds with most other elements.



Sulphur discharging into a vat.



Loading sulphur from vat face at New Gulf, Texas.

There are few phases of our modern, complex social structure into which sulphur does not enter directly or indirectly. Enormous quantities are used in the production of sulphuric acid, which is one of the most widely used chemicals in industry.

In the production of pulp sulphur for the "sulphite" and "sulphate" processes is indispensable. The rubber industry, one of the major processes of our motorized world, is dependent on sulphur for vulcanization, which is the basis of preparing crude rubber for use. The list is endless—insecticides, tree sprays, explosives, dyes, foods, textiles, plastics—all require sulphur in their production. The pharmaceutical industry requires sulphur for the preparation of many of its most useful medicinal products. The modern-day miracle of the group of substances known as "the sulfa drugs" is a story in itself. The morning paper with which you start your day and the electric switch with which you put out your bedside light at the end of the day may remind you that you literally travel on sulphur.

In the production of sulphite pulp, on which such a large portion of the paper industry depends, sulphur is indispensable. Gleaming yellow mountains of sulphur are a common sight around a sulphite mill. It is usually fed in the molten state into a burner where it is burned with air to form sulphur dioxide. The hot gas is cooled in lead pipes immersed in water and the gas then passes on to the absorption towers where it begins the long journey it has to make before it, combined with other chemicals, becomes the "cooking liquor" with which sulphite pulp is produced.

The sight of a large sulphur burner in operation never fails to attract the attention of visitors. Many stand with a feeling of horror but with a certain fascination and gaze at the raging inferno. Some ladies find the writhing interplay of the soft shades of the colored flames extremely attractive. Others say "It's cute".

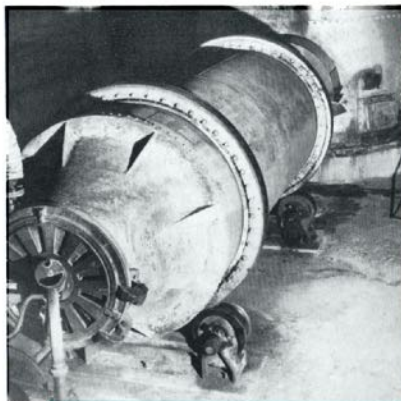
A lump of yellow sulphur may be a prosaic thing, but from the fire pots which Homer tells us were hurled against the walls of Troy to the atomic bombs of Bikini, from the bleached linens that cloaked Pharaoh's daughter

to the shimmering rayon fabrics that cloak G.I. Joe's girl friend, sulphur has been one of civilization's greatest servants.

In a number of industries, sulphur plays an essential part, and has no substitute. This is the case in the vulcanization of rubber and for many agricultural and horticultural purposes, such as insecticides and fungicides, and for the making of lime-sulphur solutions.

Other uses of sulphur are the manufacture of sulphur colors, as a preservative for dried fruits. Sulphur cements, which are applied hot are useful for anchoring metal in stone. Sulphur is also used in making sheep and cattle dips.

Another name for sulphur is "brimstone"—and the burning qualities of this chemical element is the basis for the "Hell and brimstone" punishments of the ancients.



The sulphur burner at Powell River, one of the largest in the world.



Concert Artists



COME TO POWELL RIVER

By ERNEST STONIER, *President, Powell River Concert Association*



John Charles Thomas and Ernest Stonier, president of Powell River Concert Society, get together for an informal chat.

It all started while on holiday last year. I was talking to a musician friend who lives in Port Angeles, Wash.

He mentioned that during the concert season a group of music lovers had banded together and had brought in many of the great stars of the concert stage, and that these had attracted widespread enthusiasm in his city. I asked him how they managed to finance this ambitious project in a town with a population not much in excess of 10,000.

He then outlined the "Organized Audience Plan", which had been a success in many small towns and cities throughout the United States and Canada, and which enabled areas outside the more thickly populated metropolitan centres to enjoy at minimum cost outstanding concert artists.

The plan followed by his group and adopted in Powell River is the application of the massed production principle. A "Concert Association", representative of all community, social and welfare organizations and active musical clubs in the district, is formed, and this group is the propelling force which sells the "idea" to the community.

There are two leading artists' management organizations, "Columbia Concerts Inc. and National Artists Service,

also a few private promoters who work under the above plan. Under "Community Concert Plan" we in Powell River were too late to take part in the 1946-47 series, so we took the same plan under Hilker Attractions Limited, Vancouver, B. C.

Financing a concert series in "outside" districts has been a risky proposition, and in most cases an "angel", who was prepared to assume responsibility for loss, was the only solution to the problem.

The new concert plan was revolutionary. Its aim was to do away entirely with local financial risk, continuous ticket selling and the gamble of depending on the sale of single admissions at the box office.

The community concert plan "caught on" in Powell River, and the initial response ensures a successful season next year.

A series of three concerts, featuring John Charles Thomas, celebrated baritone; the Fisk Jubilee Singers; and Jan and Mischel Cherniavsky, piano and 'cello artists, was held and proved immensely popular.

Mr. Thomas, commenting on his reception in Powell River, said:

"I have never encountered such an enthusiastic and appreciative audience—or such spontaneous hospitality. You can be assured I will tell my friends about Powell River."

Mr. Thomas gave generously of his art, and his warm personality took the town by storm.

The Fisk Jubilee Singers, from Fisk University, Nashville, Tennessee, third generation of the original Fisk Jubilee Singers, received a tremendous ovation from the audience.

The final concert of the series brought the famous Cherniavsky brothers, Mischel and Jan, to Powell River, and their reception paralleled that accorded the two previous concerts.

The overwhelming success attendant on this first "Concert Series" in Powell River has justified extensive plans for next season. Already there is a huge demand for membership.

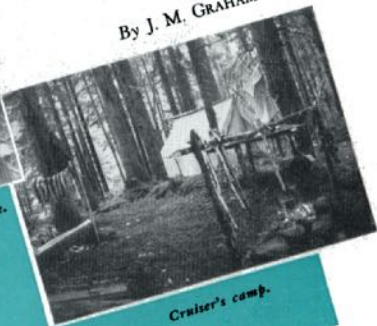
The organized concert plan, in this its first season, has sold itself to Powell River, and residents are now assured of cultural entertainment on a par with the best that may be offered to metropolitan audiences.

THE TIMBER CRUISER

By J. M. GRAHAM



Cruiser's bearproof cache.



Cruiser's camp.

In another section of this issue there is an article dealing with our reforestation program. In any story of reforestation the timber cruiser is a vital factor.

The word "cruiser" originated in the distant past 'midst the lore of logging, timber and Paul Bunyan. Yes, even Paul himself was reputed to have been a cruiser at one point in his famous career. And this term has lived down through the years to this day, even though it may be somewhat of a misnomer. To the layman, a cruiser suggests a type of boat, but a timber cruiser is not a wooden boat. Rather he is a woodsman who, through years of experience and know-how, is able to estimate the footage or volume of merchantable wood in a given stand of timber. Theoretically he might be called an "estimator".

In our forest department we have a full time cruising staff. Joe Tucker, a woodsman of over 30 years' experience, heads the cruising section. The cruisers are in the woods from early spring until snow drives them out in the fall. The summer months, of course, witness the greatest activity within the cruising section. During that season the parties are enlarged by the availability of university boys and others, and a larger area is cruised.

And now a word about this job of timber cruising:

Out here on the west coast, with our rugged topography, cruising, even under the best of circumstances, is a tough job. Make no mistake about that! In order to get his facts the cruiser must examine the timber tract on foot, regardless of creeks, rock bluffs, or even canyons. To do this he wears sturdy high boots called "caulks", with $\frac{1}{4}$ -inch caulks, or spikes, on the soles. His progress is often impeded by dense underbrush such as salal, wild rose, or the insidious devil's club. And then there are the elements—rain and snow—as well as the wild creatures of the woods. Having set up a camp he must protect his food from ants, mice and even bear. Bees and yellow jackets, too, are ever ready to meet any intruders in their woodland domain. And then, to top things off, there is the ever-present danger of an injury far from medical aid.

So much for the difficulties of cruising. Now let's look into the organization of a cruising party.

Cruising is done by a party—usually three—comprising

cruiser, compassman and a third who acts as packer and camp man. The party sets up camp in the region to be cruised and usually lives under canvas. The cruiser has brought with him a base map of the area with each section (640 acres) divided into 16 blocks of 40 acres each—known as "40's". The cruiser and compassman identify the area by locating a section post or bearing tree and set off through each row of 40's, the number of runs depending on the intensity of the cruise.

The compassman uses a small magnetic compass to follow a true line through the section, pacing and calling off the distance to the cruiser following behind. As he walks along the cruiser estimates the footage of timber a specific number of feet on either side of him and makes notes respecting the species, topographic features and elevation—the latter being obtained from an aneroid. With the day's work done the party returns to camp for dinner and the evening is spent working up the day's notes. One day follows another until the field work is completed, when the party returns to town and the cruiser prepares his map of the area, showing timber types, volumes and topographical features. Height of land is shown by contour lines.

Thus a cruise has been completed. Having this "cruise map" the owner may see how much timber he has of each species, where the best stands are situated and how the area should be logged.

Now do you think you'd like to be a timber cruiser?

New Landlord: "You know we keep it quiet and orderly here. Do you have children?"

"No."

"Piano, radio, phonograph?"

"No."

"Cat, dog or parrot?"

"No, but my fountain pen scratches!"



The Grinderman

Each day the Powell River plant turns out 750 tons of newsprint in a steady 24-hour "around the clock" grind. 88 per cent of the pulp that goes into our newsprint stock comes from the groundwood department, where 100 grindermen, operating 48 machines, grind out 650 tons of groundwood pulp daily.

The grinderman is one of the important cogs in the manufacture of newsprint. On his care, on his knowledge, on his experience, depends much of the final quality of the product which reaches our customers.

Each grinderman is responsible for feeding two machines. In an eight-hour shift he puts over 12 tons of wood through his machine. It is an exacting job. It is one that requires steady and conscientious work. Good grinding and efficient workmanship in this early stage of production will be reflected in the formation and printing qualities of the newspaper.

While no previous experience is necessary for the grinderman post, applicants are carefully selected and trained. The grinderman starts at a wage rate 10 cents an hour above the base rate in the plant, which is criterion of the importance management attaches to this demanding job.

Actual production of newsprint starts in the ground-

wood mill. The blocks, cleaned, washed and wholly barked, are admitted into these giant masticators, which speedily reduce them to a porridge-like slush. With 650 tons of groundwood produced daily—and this constituting the bulk of the newsprint stock, the grinderman has to be "on his toes", has to carefully watch and regulate his machine and turn out the highest possible quality of pulp.

The grinderman is a paper maker, just as the men in the machine rooms, who run the stock through the paper machines, are paper makers. On his shoulders rests the initial responsibility for starting Powell River newsprint stock off on the right foot.

He is one of the main cogs in the co-ordinated and finely welded chain that brings high quality newsprint to your press rooms.

At present all the groundwood machines in Powell River are three-pocket grinders. The wood is fed by the grinderman into the three pockets—a steady job throughout his shift.

The grinderman's lot has been lightened by the recent installation of the wood conveyor. All blocks are carried on skips via jeep direct from the loading platform to the machine. Piling or unnecessary back bending has been eliminated—and the grinderman feeding two machines has a steady, but no longer a heavy or back-breaking job.



Piles of 64-inch pulpwood.

A New Source of Pulpwood

There is an old saying that history repeats itself. Through the years this adage has stood the test, and today it is again abundantly evident right at our own back door. Throughout the turbulent history of this new continent our timber boundaries have been pushed ever backward to provide land for the people. That has been the compelling force.

Yes, history repeats itself and now, with the substantial increase in population on the lower coastal area of British Columbia, people are settling on the wooded land of the Fraser Valley, and on every hand land-clearing operations are under way.

There is another saying to the effect that "... it's an ill wind . . ." and that is how the Forest Department comes into the picture. Last fall, when it became evident that such large-scale land clearing was underway, we began an investigation into the possibility of obtaining some of this timber for our mill. The idea presented many unique features, problems we had never tackled before. For example, the timber was small, it had to be handled in short lengths, there was the question of transportation, and many others. Gradually each difficulty was hurdled and eventually the scheme took shape and became known as the "cordwood operation". Quite recently the plan bore fruit and the first shipment of 175 cords reached Powell River.

The operation extends from the north shore of Vancouver's harbor eastward through the towns of Ioco and Coquitlam to Mission, in the Fraser Valley. The cordwood cutters are mainly farmers and land-clearing operators. Logs are bucked into wood 64 inches long. It is piled alongside the nearest road, thence it is trucked to a loading

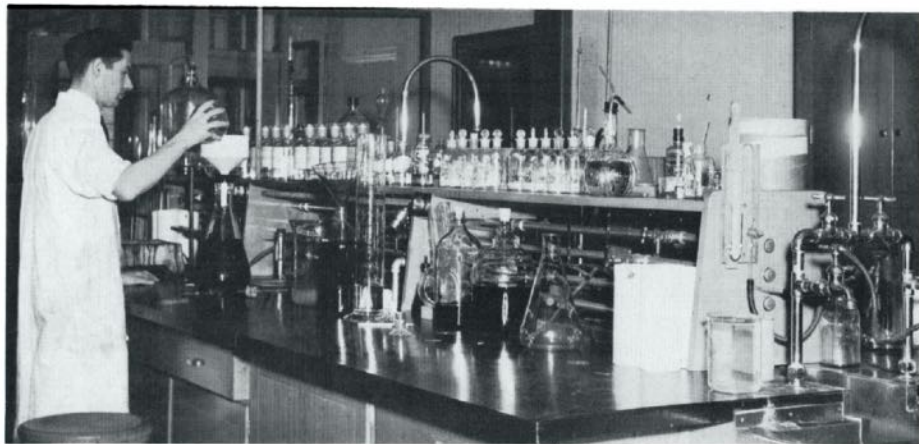
wharf on Burrard Inlet. A steel sling is then placed around the load and it is swung by an overhead crane onto a flat scow. At this point a sturdy coastal tug takes over for the 80-mile tow northward through the Gulf of Georgia and Malaspina Strait to Powell River.

With the forthcoming increase in our production, through the installation of No. 8 paper machine, the Forest Department is fully alert to the necessity for increasing the production of logs. To this end no stone will be left unturned in an endeavor to utilize every possible source of raw material for our mill.

Our present activity in the cordwood field is only the beginning. It is our hope that we may ultimately initiate the "farm woodlot" program into British Columbia. The potentialities of this movement are of such importance that it undoubtedly warrants a fuller explanation.

In many parts of the United States and Canada pulp and paper mills secure a substantial footage of logs from nearby farmers who have on their lands small forested areas. These small farmer-owned timber stands have become known as "farm woodlots". In many sections of the country the farmer has the benefit of advice from a trained forester, and using this experience he scientifically manages his woodlot, cutting those trees which should come out, leaving others which are young and growing fast. This type of managed woodlot provides the farmer with a sustained revenue to augment that received from his other crops. In effect, he has become a "tree farmer".

Naturally, as the Forest Department, we have always been wood conscious. Rest assured we are now "cordwood conscious" as well.



Dr. Ralph F. Patterson, chief research chemist, in one of the laboratories.

Trees and chemistry

By DR. RALPH F. PATTERSON, Chief Research Chemist

The great living forests of the world and the coal beds, which represent the vast forests of past ages, together comprise the greatest source of organic raw material upon which chemical industry can draw. This fact, in itself, is sufficient to make the chemistry of wood and coal the most profitable field of research, and when it is further shown that wood and wood products are the largest wastes in modern industry the urgency of such research becomes apparent. Not many years ago coal tar was a troublesome and valueless by-product of the distillation of coal; today it is the basis of dye stuff and drug enterprises so great that they eclipse in value those of the original products, gas and coke. This example of a successful utilization of a waste product through chemical research is an old and well-known story. Today a new but similar story is being written, line by line, in the marvellous developments in paper mills, plastics industries and research laboratories. It is the story of wood and wood waste products and the strides which are being made toward more complete utilization of these resources.

Many millions of tons of wood are wasted every year in logging and sawmilling operations in Canada as sawdust, shavings, slabs and other forms of wood refuse. From 30 to 50 per cent of the tree is used, the rest is wasted. This is a serious loss of raw material, even for a country as lavishly endowed with forest belts as Canada, and uses for this great potential source of valuable materials are being eagerly sought.

In an effort to understand what has already been accomplished and what may be expected from further research it is necessary to consider more closely the chemical nature of the raw material. Wood is built up of cellulose fibres together with the materials known as lignin and hemi cellulose. Cellulose is a well understood chemical product, and knowledge of its formula and prop-

erties have enabled it to be put to many practical uses. It is the basis not only of pulp and paper but also artificial silk, cellophane, imitation leather, gun cotton, photographic film and a variety of other useful products.

Regarding the wood lignin much less is known. In the manufacture of chemical pulps this material, representing from 25 to 30 per cent of the total weight of the wood, is removed from the cellulose by alkali or acid, and either burned or discarded. The waste liquors from the acid process are commonly poured into neighboring streams or the ocean, and in this way some five million tons of lignin are lost annually.

Here, then, is a challenge to the research chemist—what practical uses can be made of this enormous amount of hitherto wasted raw material? The results of recent investigations and developments have already shown that lignin is built up in large part of aromatic, organic substances, related in chemical structure to the coal tar products, and to the basic materials employed so widely in the new and rapidly growing plastics industries, and it is becoming increasingly apparent that lignin is capable of furnishing starting products for enterprises as great as those in existence today.

The hemi celluloses are complex substances made from simple sugars by the tree. They are poorly understood, but have been shown capable of conversion to adhesives, plastics and alcohol. It has been estimated that Canada could produce about 28 million gallons of pure grain alcohol per year from the sugars discarded from her pulp mill waste liquors. The technical details of the process are available but further research is necessary to find uses for such a surplus of alcohol and to decrease its cost of production. At Powell River both production and research strive toward the reduction of waste and the ultimate goal of complete utilization of our wood resources.



D. A. Evans



R. M. Cooper

New Company Appointments



John E. Liersch



J. A. Kyles

At the annual meeting of the Powell River Company Limited, held in Vancouver Tuesday, April 29, President Harold S. Foley announced the appointment of Mr. D. A. Evans, resident manager at Powell River, as Vice-president in charge of Industrial and Public Relations for the company; of Mr. Russell M. Cooper as Resident Manager at Powell River; and of Mr. J. A. Kyles as Comptroller.

These appointments, all made from existing company personnel, are universally popular and ensure a continuity of the happy and well established relations that exist between management and employees.

Mr. Evans has been resident manager at Powell River since 1936, and is widely known in Canadian pulp and paper circles. He has served in an administrative capacity in the departments of logging and mill operations with various pulp and paper plants in Newfoundland, Quebec and British Columbia for the past 30 years. For ten years previously he followed his profession of mechanical engineer with established firms in Eastern Canada.

His appointment as Vice-president in Charge of Industrial and Public Relations is evidence of the importance which the Powell River Company attaches to this phase of its activities, and of its intention to maintain and expand them in the future.

In taking over his new and greater responsibilities Mr. Evans engages in a phase of industrial life that is close to his heart. Labor problems and employer-employee relations are subjects which he has studied extensively over a 40-year period in Canada. Few men are better qualified to speak with more authority, more experience, more varied background on industrial and public relations.

The new resident manager, Mr. Russell M. Cooper, who was appointed general superintendent at Powell River in March, 1941, and assistant resident manager in 1946, has had over 25 years' experience in pulp and paper mill operations. He attended McGill University and started as a paper tester in 1921. He worked his way up through

the ranks, has held successive supervisory posts with several Eastern Canadian mills. He was general superintendent of the Ontario Paper Company's plant at Baie Comeau, Quebec, before coming to Powell River.

Mr. Cooper is a veteran of World War I, serving overseas with the Canadian Engineers.

Russ Cooper's promotion to Resident Manager is recognition of the all-round qualities which, as General Superintendent and Assistant Resident Manager, he displayed in his plant operating duties. In his six years at Powell River his operating knowledge, backed by a quarter of a century in the paper making trade, has been a main factor in the smooth and continued operations of our plant. As Assistant Manager he has been closely associated with managerial policy, and is a popular and logical successor to Mr. Evans.

Mr. J. A. Kyles, appointed comptroller to succeed J. N. Turvey, who resigned last September, has been with the Powell River Company since 1925. He entered the firm as an accountant and has held successively the posts of chief accountant, mill secretary, and assistant resident manager. He served four years overseas in the R.C.A.F.

Mr. Kyles has a wide background of financial experience, has been in close touch with top management for many years, and his appointment as comptroller is recognition of his outstanding qualification for this key post in the company organization.

Coincident with the above, the appointment of John E. Liersch to the position of forest engineer was announced. As head of the Forestry Department at the University of British Columbia Mr. Liersch has had an extensive experience in the technical background of forestry and is well versed in the practical end of the logging business.

As forest engineer Mr. Liersch will be responsible for the forestry program which the Powell River Company contemplates in order to put its forest lands under sustained yield management, thereby ensuring a perpetual wood supply for its manufacturing plant.



Alex Morris drops the suggestion in the box. It was worth \$500.00 to him.

HAS THE SUGGESTION BOX SYSTEM PAID OFF

This question may be answered in the affirmative, because:

1. The company has made savings from the ideas presented by the employees.
2. Many of the ideas stem from long experience on a particular job not necessarily possessed by anyone else in a department.

The gain from this suggestion system has been considerable. The feeling of co-operation between employees and management has improved. The employees feel that their ideas will receive full study.

The following are typical suggestions which have been submitted on safety, auxiliary departments, production, and the broad scope suggestions:

Safety—Four-wheel trucks loaded with pulp logs are carried to the beater room on a heavy incline freight elevator. To prevent these trucks from falling off the back edge a suggestor outlined a method whereby an iron bar, the full width of the elevator, automatically raised itself above the deck when the elevator platform was not in contact with the bottom stationary unloading platform.

Auxiliary—One of the foundry employees, on his own initiative, instituted the use of sulphite waste liquor as a binder for foundry cores, thus replacing the use of a considerable quantity of molasses and linseed oil with waste sulphite liquor that is available at no cost.

Production — A paper machine employee suggested changes that should be made in the spreader bar between

the calender stack and the reel that resulted in a considerable reduction in the number of breaks in the paper web at this point, thus improving operating efficiency.

The Union Management Committee handling suggestions was instituted in 1943. Since that time 500 suggestions have been handled through this committee. Of this number 153 have proved to be worth a monetary award varying from \$5 to \$500.

A \$500 award has been made on one occasion, and there have been five \$100 awards.

The suggestion box is opened by representatives of union and management and investigations are carried out by an engineer in conjunction with the various departmental superintendents concerned. If the suggestion is considered worthwhile it is given a trial, and if satisfactory and a tangible saving can be shown, then the award made is based on the savings. However, in many cases it is very difficult to determine the value of the suggestion, so the department head concerned is asked for his opinion as to the amount of award that should be made. It has been found in most cases that the union members of the committee have been in complete agreement with the department head's opinion.

If a suggestor feels the award is insufficient he can appeal, and the value of the award may be reinvestigated. In general, suggestions having the most merit come from men who apply their intimate knowledge of a particular job to a suggestion. The percentage of usable suggestions for which awards have been paid is unusually high.

Everyday is "D" Day for

Purchasing Division



R. A. Baker, purchasing agent,
Powell River Company Limited.

There are still plenty of otherwise intelligent citizens who go around believing that an ostrich will bury its head in the sand, that bears hug people to death, or that toads cause warts. Probably these are the same poor innocents who are stuck with another whimsical myth—the belief that a Purchasing Division functions merely "to buy stuff". ("What a cinch! All those boys gotta do is just buy stuff.")

It's high time this ugly canard (see Webster: "An absurd story or report") was properly spiked; and, given half a chance—or even a quarter of one—the fourteen members of the Powell River Company's Purchasing Division will spike it for you quicker than you can cast an aspersion.

They'll tell you, for instance, that it's the job of P.D. to build up and maintain reliable cost records, and to maintain liaison with an infinite variety of supply sources all over this continent and as far afield as England.

Of course, if pressed, they'll admit that they do indeed "buy stuff". But they're quick to explain that this single item involves the purchase of all equipment, material and supplies for the big Powell River plant and its subsidiaries. They'll explain that such purchases are many and varied and that within the past year they have ranged from "one only oblong goldfish bowl complete with two goldfish, feed and tank ornaments" to huge machines—a paper machine, hydraulic barker, water wheel, a steam turbine.

They'll tell you that they are in constant contact by radio telephone with the logging camps, and with Powell River by teletype.

They will not forget, of course, to tell you about their close co-operation with the stores, traffic, insurance, legal, engin-

ering and operating departments, and of their activities in the customs and sales tax sphere—a considerable task in itself. This work involves the careful and most expeditious routing of all equipment destined for Powell River and elsewhere. It necessitates the adequate protection of same by complete insurance coverage and a large volume of Canadian Customs work when American and other non-Canadian purchases are involved.

They'll further explain that their expediting procedure involves sending out of enquiries, receipt of proposals, placing of purchase orders, and the efforts they make to ensure that suppliers live up to delivery promises. In addition to the member of the staff whose job it is to expedite local and Pacific Coast orders, they employ the services of established inspection and expediting engineers in Eastern Canada and the States as well as in Great Britain. They realize that it is the actual delivery date of materials ordered that determines production schedules, costs, development of new products and the date when new plant facilities can be brought into production. They'll regale you with harrowing accounts of their struggles against material shortages. However, they claim that there is still one commodity in plentiful supply, unchanged in price, which is bought and sampled regularly by the members of the department. What is it?—ASPIRIN! But despite that they claim they still have plenty of headaches.

And finally they'll tell you that D-Day is every day in the Purchasing Division—and means Delivery Day.

A straw in the wind for growing consumption of paper by the backward regions is the report that there are now 17 newspapers published in the region of Kenya, South Africa. These are published for African natives.



General view of purchasing office.



Prof. J. E. Liersch

NEW FOREST ENGINEER

Announcement was made this month by our company of the appointment of Professor John E. Liersch to the position of forest engineer. Professor Liersch brings to Powell River a wide background of both technical knowledge and practical experience.

John Liersch is a graduate of the University of British Columbia. He obtained his B.A. in 1926 and his B.A.Sc. in 1927. Following graduation he was employed by the British Columbia Forest Service for two years. In 1931, after study under the Anderson Fellowship, he was awarded his Master of Forestry degree from the University of Washington. In 1932 he won the Pack Fellowship for selective logging studies.

John then worked successively as logging engineer with the Crown Willamette Paper Company, construction superintendent with the Malahat Logging Company, and as a private operator in the Queen Charlotte Islands.

In 1942 he was appointed head of the Forestry Department of the University of British Columbia. During the war his extensive experience was recognized by the British Government and he was granted leave of absence to join Aero Timber Products Limited as production manager in the supplying of vital aeroplane spruce for the war effort. He returned to the university in 1945.

During the summer of 1946 he headed a field party which carried out extensive reproduction investigations on company-logged lands.

In his new position John Liersch will be directly responsible for forestry work and forest engineering, which will include the planning of logging operations.

VISITORS

One of Australia's leading publishers, Sir Lloyd Dumas, chairman and managing director of Advertiser Newspapers Limited, and publisher of *Adelaide Advertiser*, dropped in for a few days' visit recently. Sir Lloyd was accompanied by Lady Dumas and their daughter Vivian.

The Australian publisher stated that Australia, like this continent, was acutely conscious of the current newsprint shortage, but went on to say:

"Australian publishers are fully aware of the problems and difficulties which Canadian newsprint manufacturers are facing, and we consider that you are doing a highly creditable job of distribution in the face of world-wide clamor for your product."

Sir Lloyd is confident that the Pacific will be the future centre of the world's trade gravity, and that Australia and the North American continent will enjoy greatly expanded trade relations with each other in the coming years.



Sir Lloyd and Lady Dumas and their daughter Vivian.

Sir Lloyd, who is also a director of Australian Newspapers Limited, the Tasmanian newsprint manufacturing company, will visit Eastern Canadian points before proceeding to the United Kingdom.



G. F. Haberichter

We were glad to have a visit from Mr. George F. Haberichter of Chicago. Mr. Haberichter is buying supervisor of United States Gypsum Company, one of the largest manufacturers of building materials in the United States. United States Gypsum Company are regular users of Powell River unbleached sulphite pulp. They use such large amounts of paper in their operations that they have their own paper mills.

Mr. Haberichter said, after an extensive tour of the Powell River mill, "I am greatly impressed with the size and efficiency of the mill. You are to be congratulated on the foresight you have shown and the results you have already obtained in your expansion program. We find the quality of Powell River pulp excellent for our paper making." Mr. Haberichter told us that the United States Gypsum Company is also increasing their capacity to meet the heavy demand of the construction industry.

There will be a very bad shortage of newsprint in the U.S. because Canadian and Scandinavian mills will find it more profitable to send other grades of paper, according to George Olmstead, Jr., chairman of the Bookpaper Manufacturers' Association.

A 10% cut in the amount of newsprint allocated to German newspapers in the American zone was reported by the *New York Times*. In direct contrast to this, the report continues, is the 50% increase given to some Russian controlled papers.

FOREST DEPARTMENT

A Reality



Western red cedar



Topping a spruce tree



Douglas fir

As one steps off the elevator on the eleventh floor of the Standard Building to visit our forest department, an illusion of looking out into a forest is created by three translite colored photographs of typical forest scenes. These scenes are shown above in black and white. The translites, duplicates of ones exhibited at the San Francisco Fair, were made by Leonard Frank Photos, of Vancouver.



Paul Bunyan's **STRENGTH** was legion. When he logged the Pacific Northwest he branded his logs with a pinch of his powerful fingers.

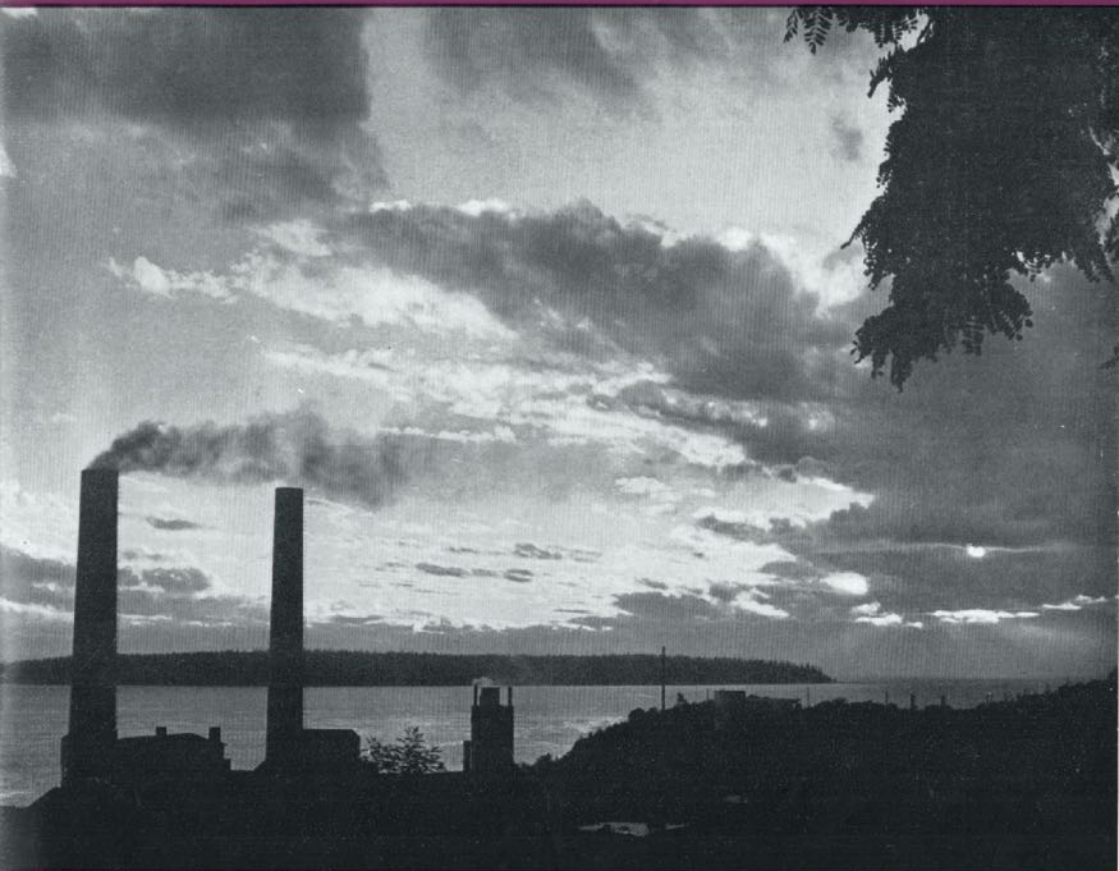
The exceptional **STRENGTH** of POWELL RIVER NEWSPRINT is derived from the GIANT SPRUCE logs which come from the Queen Charlotte Islands.



POWELL RIVER NEWSPRINT

Powell River

DIGESTER



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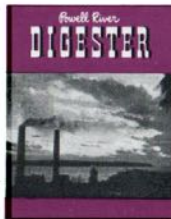
Editor

J. A. Lundie

Staff Photographer

O. J. Stevenson

Through the pages of this journal we hope to tell our readers about Powell River and its products.



The Cover Picture

Some of the finest sunsets in the world may be seen from Powell River's front door. With the town looking over the waters of Malaspina Straits, dotted with green clad islands, and with high, towering, snow capped peaks in the background, a sunset at Powell River is something worth seeing.

On this month's cover, Ossie Stevenson catches a typical Powell River sunset, with the twin stacks in the foreground and the island studded Malaspina Straits in the background.

OUR PRESIDENT



HAROLD SCANLON FOLEY

Mr. Harold Scanlon Foley, President of Powell River Company Limited, requires no introduction to our readers. Since joining the Company eleven years ago he has covered most of the areas in the United States and Canada where Powell River newsprint is used. His personality and executive ability are known and recognized throughout the pulp and paper industry.

When Mr. Foley was appointed Executive Vice-President of the Company in 1936, he faced challenging times. The depression was still with us; widespread unrest and labor difficulties headlined the world's press; uneasiness and uncertainty darkened the industrial picture.

Over eleven years, his leadership has permeated the entire Powell River organization. His driving force, resolution and personality have won world-wide recognition for our products; and a reputation for sound judgment and fair dealing on the part of our management. A well-known commentator summed up his success in these words:

"Beneath his affability of manner, he has unbending courage, deep devotion to duty, a resolute and persistent will, and an intuitive perception of people and situations."

Despite the pressing problems of sales and production with which the Company has been faced, Mr. Foley

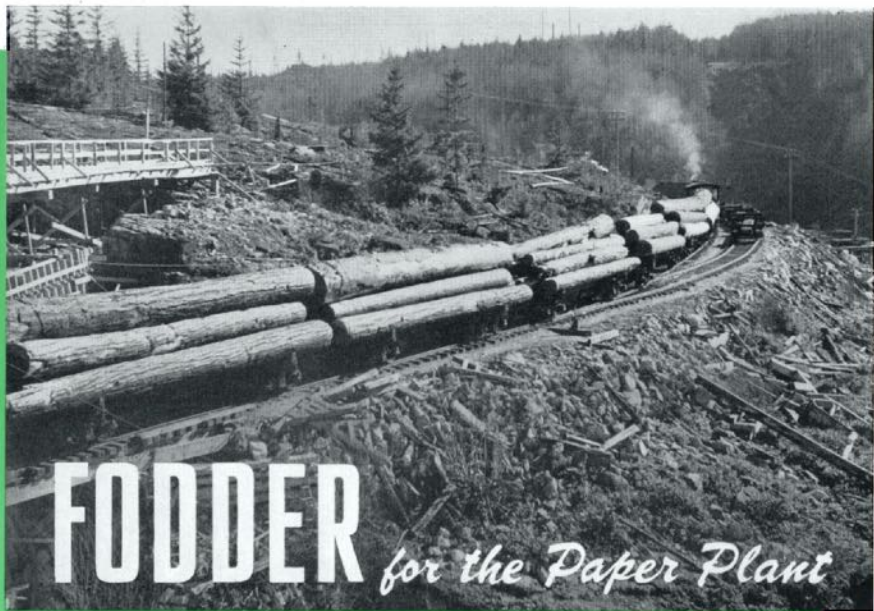
has taken a keen and personal interest in employees' welfare and recreation plans; and today the standard of living of Powell River Company employees and the welfare and benefit plans which they enjoy are unsurpassed in the pulp and paper industry.

On July 23, 1940, he was appointed President, succeeding the late Mr. S. D. Brooks, who was elevated to Chairman of the Board of Directors.

Under the Presidency of Harold S. Foley, Powell River has become a smooth, co-ordinated and well functioning team.

Born in Minneapolis, Minnesota, on September 9, 1900, Mr. Foley graduated with a Bachelor of Commerce degree from Notre Dame University. He grew up in the lumber business, with his father, the late J. S. Foley, President of Brooks-Scanlon Corporation at Foley, Florida. He operated a retail lumber yard and was later Vice-President of Brooks-Scanlon Corporation, one of the largest lumber manufacturers in the State of Florida.

To our President on his 11th Anniversary as a member of the Powell River Company family, we wish new and greater success and look forward to having his inspiration and guidance with us in the years ahead.



By NORMAN ENGLISH, *Manager of Logging Companies*

In the March-April 1947 issue of the Powell River DIGESTER, Vice-President O'Brien told you of the six billions of feet of standing timber, constantly growing and being added to, behind the Company's claim to an operation in perpetuity.

It is my task to explain briefly how annually the one hundred and seventy-five million feet of logs the plant digests—175,000 trees (500,000 pieces)—get from the standing position in many places in the Province, spread over a distance of five hundred miles, to the huge plant at Powell River.

Once upon a time the Company was able to rely on many independent logging operators for its raw material. As timber receded from the accessible "shows" adjacent to salt water; as more money was required to develop tracts; as many competitive uses developed for the chief ingredients of newsprint, and production was stepped up to meet the crying needs of publishers, our Company found it necessary to actively participate in the logging business in a big way. That policy started five years ago. It has been a genuine life saver. We are expanding every day.

Today the Company has four wholly owned subsidiaries employing 750 men housed in twelve separate camps reaching from Stillwater on the mainland (20 miles South of Powell River) to Juskatla in Massett Inlet, Queen Charlotte Islands, five hundred miles north of Powell River. They represent an investment of over \$2,000,000.00.

All of the species, other than spruce, hemlock and balsam which we require for the manufacture of pulp and

paper, are sold in the open market to saw and shingle mills in trade for pulp material. Thus, all timber produced by our camps is grist for the mill.

Approximately 75 per centum of the plant's demands comes from our own efforts, the balance from contractors working on our timber, or from outside sources.

Much has been said via newspapers, radio, and cinema of the manner in which trees are "felled and bucked", "yarded and loaded", and transported by rail, truck and/or water to the consumer, so that even the far away reader of this DIGESTER would not be interested in repetition of detail.

Suffice to say that our producing units are well financed, well managed, and employ the very latest gadgets known to the industry, particularly on the Pacific coast of British Columbia, Washington, Oregon, and California, including power falling and bucking saws, skidder and high lead aerial systems, diesel engined "donkey" machines, trucks and tugs, moving pictures, radiotelephones, portable saw mills; etc. From the moment a tree is cut until it is delivered to the mill it's a story of mechanization.

We have the help of well developed engineering, forestry, cruising, and mapping departments.

We, too, spend a lot of time bettering the living conditions of employees through well organized personnel and safety departments. We work under the most liberal Workmen's Compensation Act in the world; we have



1. Modern power saws facilitate and speed up felling operations at O'Brien's.

the privilege of subscribing to a pension scheme, a group life insurance policy, medical and hospital plans, all of which are largely financed by our logging companies. Yes, we've gone a long way since the horse and oxen days.

To demonstrate the farsightedness of management and the versatility of the logging layout, a word on each of the four operating units may not be amiss.

KELLEY LOGGING COMPANY LIMITED. The Queen Charlotte Islands camps are located at Aero, Beattie Anchorage, Church Creek, Mathers Lake, McCoy Cove, and Skedans Bay in Cumshewa Inlet, and a new operation is just being opened at Juskatla, Massett Inlet.

All but Beattie Anchorage are log producers.

Logs are towed to and assembled at the Beattie Anchorage rafting camp. "Kelley" rafts, containing approximately 2,000,000 feet, board measure, requiring two weeks to build, are bundled together with heavy wire lashings into a cigar shaped package to withstand the heavy weather in Hecate Strait and down the inside passage to Powell River.

While these camps are admittedly far away and difficult to supervise, they produce the Sitka spruce logs so necessary for the colour and strength of the famed Powell River news sheet.

One camp brings its logs to Cumshewa Inlet with a railroad; one with an "A" frame and donkey engine on a float; and the other five by trucks over planked and timbered roads.

Communication between camps and Vancouver is secured through boats, radiotelephones, and airplanes.

Because of its distance from any city or community, a small, well equipped four bed first aid or dressing station and a resident physician are maintained at the rafting camp.

ALICE LAKE LOGGING COMPANY LIMITED at Port Hardy on Vancouver Island, 125 miles North of Powell.

River. It produces cedar and pulp species, approximately 50 per centum of each. Diesel trucks and a network of plank roads are responsible for getting the logs to a central booming ground where they are rafted into units of about 200,000 feet.

The camp is a mile from the village of Port Hardy, on the Provincial highway to Coal Harbour and Fort Rupert. It embraces twenty-five homes for key employees. The camp and its work and recreation facilities are modern in every respect. It can be reached by a daily airplane service to Fort Rupert, or by Canadian Pacific and Union Steamship boats.

BELL AND CAMPBELL LOGGING COMPANY LIMITED on Harbledown Island, eighty miles northwest of Powell River.

This is a small camp producing mostly pulp logs which are hauled by trucks on plank roads.

At present the logs are bundled by means of steel bands and clamps before the whole load is lifted into salt water. Savings in rafting, towing and risk are expected.

The O'BRIEN LOGGING COMPANY LIMITED is at Stillwater. Camps "B" and "C" are production units to Gordon Pasha Lake, a fresh water storage area, using diesel and gas engine logging trucks hauling on gravel roads.

The input of both camps is loaded out of the lake onto railroad cars, hauled three miles to Camp "A" at salt water where the logs are flat rafted for market. Fir and cedar are towed 75 miles to Vancouver, the pulp 20 miles to Powell River.

Modern logging is a progressively important scientific job dealing with a crop which can be and is regrown with the help of nature and man. It is an everlasting source of well paid jobs for future generations of loggers. You have already heard that the Powell River Company, with its growing timber reserves, augmented by natural and artificial reforestation, contemplates a near perpetual life. Therefore, I believe more and more thought and enterprise will be put into the logging and logging engineering ends of the paper business than ever before. Watch us grow with the trees!



2. Big logs being loaded on the sturdy logging trucks at O'Brien's camp.



3. Topping a tree by the big rigger is one of the most fascinating and spectacular features of western logging.



Chief Sulphite Cook Ben Watson tests a sample of pulp.

The SULPHITE COOK

By AMBROSE MCKINNON, Sulphite Supervisor

Approximately 92 tons Air Dry of Chemical pulp, cooked by the Sulphite Process is made daily and mixed with groundwood as the main ingredients of Powell River newsprint. A further 140 tons cooked to the bleachability desired by the purchasers, is produced daily and shipped in 450 lb. bales from the Kamyrr machine to other mills.

This Sulphite process starts when the chips, mainly hemlock, come from the barker mill chippers to bins above the digesters. These digesters, six in number, are steel containers approximately 50 ft. high and vary from 14 ft. to 17 ft. 6 ins. in diameter. They are lined with two layers of special brick to protect the shell from the acid and to conserve heat. After the digesters are filled with chips, acid is pumped in between the chips. Our largest digester which produces 16.5 tons of bone dry pulp each filling takes 34,000 gallons of acid. The cover is bolted on after filling and pressure is brought up to 80 lbs. with steam. The duration of the cook is from 7 to 9 hours.

The sulphite cook is the No. 1 man of the department and is in complete charge of this complex operation with the assistance of two helpers. A schedule is arranged and each digester is blown—that is emptied—when correctly cooked, by opening a large valve in the bottom. A digester is blown every hour and 25 minutes allowing 45 minutes for filling with chips and acid. This schedule must be maintained to the minute. This means that when the digester is started the cook must control the temperature and pressure so that the stock when blown $7\frac{3}{4}$ hours later will be up to specifications and blown on time. A contributing factor is the strength of the cooking acid, which

is a blend of raw acid and relief acid. When the pressure in the digester reaches 80 lbs. an automatic valve opens and lets acid out according to the amount of steam taken in at the bottom. This relief acid is blended with raw acid from the acid storage tanks in a 95,000 gallon spherical steel container called a high pressure accumulator.

When I came to the paper industry, the only indicating help the cook had was a steam gauge on the digester cover and a glass thermometer in a socket in same cover. When pulling the thermometer out to read it, 10 or 15 degrees would disappear before your eyes could get a reading. Now the cook at Powell River has 32 recording instruments and approximately 35 plain gauges for acid, steam, water, and air, covering temperature, pressure and liquid level readings.

The cook must ever be on the alert for pressure leaks and mechanical failures of the many acid and circulating pumps and figure the best way to deal with these problems without losing production. He must also know the symptoms when an apparently perfect recording instrument is really not telling the truth. Such an instrument failure can mean hundreds of dollars if the contents of a digester is ruined or may mean shutting down a paper machine or the Kamyrr pulp machine.

The cook must work in perfect co-operation with the screen rooms which handle the stock after blowing and must make sure, through his helpers, that there is room to blow. The stock for newsprint is handled in the old screen room through blow-pits and the stock for the Kamyrr machine through a blow-chest of the latest design.

Safety

FIRST

By STUART SLADE, Safety Inspector



Resident Manager Russell M. Cooper (right) presents Henry Morris, paper maker, with a \$60 cheque for safety suggestions.

As in many walks of life, co-operation is necessary and essential to smooth and successful operations. Never was this truer than in Safety. From top management down to the brand new employee, it is essential that everyone co-operate to prevent accidents. The fact that the Powell River Company's accident rate is dropping year by year and month by month, is due in no small part, to the co-operation that is being built up among its employees.

One of the main planks of our Safety Program is Union participation. To achieve this, the Company invited the local Unions to nominate their own representatives to our Safety Committees.

In a plant of this size, employing roughly 1700 employees, the ordinary committee composed of three from management and three from labour would provide very poor coverage. To overcome this, we have three regional committees, each of which has about twenty-five representatives. No. 1 Committee is composed of the wood processing departments: Log Pond, Sawmill, Barker Mill, Groundwood and Sulphite Departments; No. 2 Committee, Paper Manufacture and Handling: Beater Rooms, Machine Rooms, Finishing, Railroad and Wharf; No. 3 covers all maintenance and service departments.

About twenty of each twenty-five members are Union appointees, the other five being appointed by the Company.

These committees meet every month to consider plant hazards, unsafe working habits, and guarding of machinery. All accidents are reviewed and an attempt is made to analyse the cause of each accident.

Periodically special films dealing with Safety are displayed. Sometimes these films, upon the recommendations

of the committees, are shown to the general mill and have been of great interest to many employees.

It has been felt that an Accident Prevention Booklet would help a great deal in educating the new employee in safe working methods. To do this a competition was run and prizes awarded for the best set of Safety Rules. By this method the co-operation of the employees in enforcing and obeying these rules was ensured.

The book is being printed this summer. A copy will be issued to all employees.

In all Safety work, it is, of course, recognized that a new man is more subject to accidents than the old hand. To overcome this, the new employee is passed on to the Safety Department for advice after leaving the personnel officer. Here he is warned of any special hazards in the department to which he is assigned, informed about safety boots which he may obtain at cost, and provided with the Workmen's Compensation Board regulations. He is then taken to his department, shown where to get First Aid and introduced to his foreman and Safety Committee representatives.

From then on the foreman and representatives show him how to do his job and keep a fatherly eye on him.

The Safety Department hopes, in this way to promote a friendly footing with the new man, to inspire confidence in Safety Rules, and to explain the reason for them, rather than just to order him to follow them.

Last, but not least, is the co-operation of the Engineering Department in providing guards for new machinery when it is installed and in helping to solve problems arising in operating new machinery.

River of Paper Shown Overseas

We were very gratified to read the following press account from a British newspaper.

"By courtesy of Messrs. Price and Pierce, Ltd., who distribute Powell River Sulphite pulp in Europe, British paper makers and other consumers of wood pulp have been given opportunities of seeing how pulp and paper are produced in Canada. This was through the medium of the film 'River of Paper' in Kodachrome made for the Powell River Company Ltd. of Vancouver, B. C., one of the Canadian companies that supplied the British paper trade with pulp throughout the war years.

"Among those who attended recent showings arranged through the courtesy of Gaumont British Picture Corporation at Film House, Wardour Street, London, were many well known industrialists and men widely representative of the entire paper and board industry in the United Kingdom.

"The story so graphically presented began with the felling of giant spruce trees, and proceeded with the preparation of the pulp, manufacture of newsprint, right to the delivery of the familiar daily newspaper to the household.

"Memorable scenes are those which record the magnitude of logging operations on Queen Charlotte Islands, which, as the film commentator so aptly remarked, can only be seen on the Pacific Coast of the North-West.

"The camera's mobility is expertly employed from ground to air, especially in the thrilling shots of the work of the high-riggers, pursuing their hazardous employment with what, to the laymen, appears incredible nonchalance.

"The manufacture of pulp and paper at Powell River is finely depicted, animated charts ensuring complete understanding of the processes employed.

"The film ends with some attractive views of the town, showing a well-ordered community living in beautiful surroundings which provide fine facilities for outdoor recreation. Altogether, this film provided an impressive glimpse of a major Canadian industry, and left the spectator with no doubts as to the efficiency of Powell River and its products".



Jack Frame

One of the most recent and popular additions to our staff at Powell River is young, husky, good looking Jack Frame, new Athletic Director.

Jack Frame has been hired as a full time coach and athletic instructor. His presence is another link in the expanded, long range recreation and welfare program of the Powell River Company. In bringing this athletic expert to Powell River, we hope he will be of real assistance in stimulating a love of clean and healthy athletic endeavour among our youngsters. With this objective in view, the Company, in addition to utilizing Mr. Frame as an organizer of athletic activities among employees, has placed his services and experience at the disposal of the local schools.

Company Hires Full Time Athletic Coach

The presence of a full time instructor has already paid dividends. Mr. Frame holds regular instructional classes in all sports, tennis, baseball, track, etc., for youngsters of all ages, with scores of children in attendance.

Jack Frame, a native of Toronto, comes to us well recommended. He was selected from various candidates, after careful investigation of his qualifications and past experience. At the time of his appointment he was employed as Recreational Director of boys schools, by the Ontario Government. During the war he was sports organizer at several large, war industrial plants.

In bringing Jack Frame to Powell River, the Company feels it has laid the foundation, not only for the building up of high-class athletic teams, but for providing full opportunity for the organized development of future sportsmen and first-class citizens.



By I. H. ANDREWS, *Technical Director*

Paper in the familiar form of a mat of felted fibres was known at least 2000 years ago in China. Its manufacture by hand methods developed as an art, utilizing materials that readily supplied suitable fibres.

About the year 1800 an invention for making a continuous web of paper was brought out, an invention which, it is interesting to note, maintained the essentials of the hand-machine method. Following this the web printing press made its appearance in 1865. These innovations gave a great impetus to the manufacture and use of paper and from that period onward source of supply became acute and the world was soon faced with a shortage of rags.

The paucity of material had led to the study of other possible sources of supply and scientists and students directed their energies and imaginations to the search for suitable paper-making materials.

It was not long—about 1880—before a number of chemical processes were developed—sulphite, sulphate and soda—which gave a very suitable fibre from wood, and, too, a mechanical process was perfected. Since then trees have been the lifeline of the modern paper industry.

The resultant chemical processes produced suitable pulps for making grades of writing and printing papers as well as a multitude of other uses to which paper is put, while the mechanical method, producing what is known as groundwood pulp, provided a vital and cheap source of fibre. The daily newspaper of today is largely possible through the discovery of the groundwood pulp process.

Every tree is an aggregation of hollow, thin-walled cells. Trees all grow in much the same manner, forming a yearly ring of cellular or fibrous material. There are a great number of tree species broadly divided into two main groups—coniferous or softwoods, and deciduous or hardwoods, the wood structure of the two types differing mainly in the character of the fibres and in the amount and type of resins and other minor constituents. These latter, aside from troublesome features, are of no importance in paper making, and the fibre characteristics of the wood are the dominant feature.

If a cross section through a coniferous tree is examined the wood will be seen to be composed of a series of rings with a common centre, each of these rings representing one year in the life of the tree. In each ring there is a

light colored band of softwood—called springwood because it is produced in the spring of the year—and a darker band of harder wood called summer-wood. The summer wood is harder because its cells are smaller in diameter and have thicker walls than those of the spring wood. This is apparently due to the fact that in the spring there is a large demand for sap, so that the cells then formed have thin walls and large openings. Later on in summer the flow of sap is much less and the cells then formed have smaller openings. The summer cells with their thick walls supply support for the tree. In the autumn, growth stops and when it begins again the following spring with thin large cells formed against the thick ones of the previous summer a distinctly visible line of demarcation is formed.

The wood cells of coniferous trees are elongated resembling pipes— $1/8''$ to $1/5''$ in length, while those of the hardwoods are of a short nature— $1/25''$ to $1/16''$ long. Because the fibres typical of the coniferous trees are generally preferred in the manufacture of both groundwood and chemical pulps, the pulp and paper industry has settled adjacent to the large softwood timber areas—the spruce forests of Canada and Northern United States, the pine forests of the Southern United States, the coniferous forests of the Northwestern States and British Columbia, and the spruce and pine areas of Scandinavian countries, Russia and Europe.

The main bulk of all papers, newsprint, publications, printing, book wrappers, etc., are made from the softwoods. Hardwoods are used in minor amounts in various parts of the world but seldom has it been possible to make a competitive article with the use of hardwood alone.

Here in British Columbia we are favoured by a coastal forest area, which together with that of the Northwest United States, is unique in its stands of coniferous trees. The conifers found in this coastal forest are Sitka Spruce, Western Hemlock, Balsam Fir, Douglas Fir, and Cedar. These trees grow to heights in the neighbourhood of 200 feet and to diameters as great as 10 feet in the case of Sitka Spruce, Douglas Fir and Cedar, and as large as five feet for Hemlock and Balsam. The present forests are virgin growth but after cutting, followed by supervised reforestation, 70 years or so upon depletion a new growth will be ready for harvest.

(Continued on Page 17)

THE OLD TOWN HAS CHANGED

By ARTHUR DUNN, Head Checker



The original Patricia Theatre, formerly located on the present Memorial Site, and torn down in 1928.

rather uncertain and limited markets. From a small and crude beginning our shipping facilities have steadily expanded, and over the years some of the largest freighters have berthed at our docks. As in shipping so in production. Our 1912 daily output of 130 tons seems trivial compared to the 900 tons of paper and pulp today.

The greatly expanded volume has demanded more efficient methods of handling. Early in the history of the Company, the fine horses which were used to haul the trains of loaded paper cars were replaced by electric locomotives. Slipways on the wharf were replaced by electric elevators and, during these last few years, motor lift trucks have displaced the hand trucks which were used for many years. The various departments around the plant have each seen revolutionary changes as the volume of production has gone up and up. Machinery, which at one time was the last word, in turn became obsolete and was replaced by more modern pieces. Chemical research was introduced and has grown to be a very important factor in the production of a better and uniform product.

As the appearance of the mill town and district develop. The early objective was to put the mill in production and little time was available for building of family homes. In those early days, we still housed many men in shacks and bunkhouses. Gradually the townsite was laid out and neat rows of houses sprung up. The transient population of the construction days began to be replaced by people who wanted to make permanent homes here; and to accommodate them more and more homes were provided. During the later construction periods the demand for housing became so great that the Company could not keep pace with it, and many families began to build their own homes in the suburbs. As a

It has been a fascinating experience for many long service employees of Powell River Company to have seen, and been a part of, what may be termed the progressive evolution of this industry, town, and district. During the early days of production we had

result the outside districts now known as Wildwood, Westview and Cranberry Lake came to life.

The development of recent years has certainly amazed all but the most optimistic people. The districts of Westview and Cranberry Lake now are organized as villages with all modern conveniences.

The arrival of the first automobile in 1917 caused quite a sensation. The only roads were the oiled dirt roads around the small townsite and two very rough roads to Cranberry Lake and what is now Westview. Certainly not speedways. For a time we had very few cars but by 1939 and the beginning of the World War we had well over 700 in the district. Our roads had been improved and extended to a total of possibly 100 miles, some good, some not so good. Entertainment during leisure hours was very limited in the teen years. Cleared land simply didn't exist. Finally a small Ball Park was dug out of a sidehill and was the scene of many great games and sports. For a time baseball was the only game played here but as other ground became available, football, bowls, tennis, golf and almost all outdoor games have been introduced.

Our first picture show was very crude but served its purpose well until the present Patricia Theatre was built. For dances, concerts, and other large indoor gatherings we had the old Central Hall. As increased business required more office space the new Dwight Hall was erected and the old Central Hall was turned into offices. We have many pleasant memories of that old Hall. Even progress can cause pangs of regret at times. And so we have grown up. We can liken the Powell River of the early days to an infant with tottering and uncertain steps. As the infant grows and the step becomes firmer so have we grown until now we have reached what may be compared to robust manhood. Or perhaps it is only robust youth as the growth still continues and few can predict what more wonderful changes will come and how much and how far the Powell River District will develop. Progressive evolution indeed!

We were musically minded in the old days. Even Bob Scaulon (front left), now a director, joined the band.



It's Nice To Live in **POWELL RIVER**



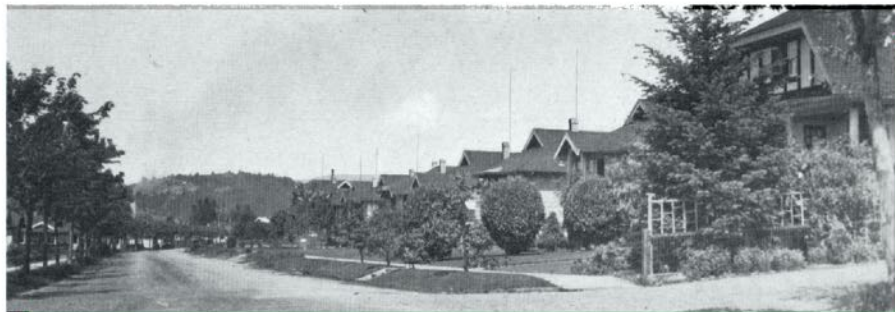
1. Lynn Olsen, Department Store staff, in an appealing beach pose.



2. Lorna Macindoe, daughter of J. Macindoe, insurance department, is a very attractive mermaid.



3. Lynn Olsen and Monty Palmer view the sights.



Typical homes and gardens in Powell River.

Community Pride in HOMES and GARDENS

Powell River residents have always been proud of their town—proud of its clean streets, proud of its homes with its well kept lawns and gardens, situated in an ideal scenic setting. Scores of visitors have been impressed with the evidence of a compact, co-operative community spirit that has earned for Powell River a reputation as an industrial garden city.

Powell River gardeners are an exacting clan. Woe betide the laggard who puts off his gardening duties until tomorrow. The clan, en masse, will pounce on the poor unfortunate, harry him, pester him, until in sheer self defence, he grabs shovel, rake and hoe and goes to work.

Any evening, along Ocean View or Maple, or Oak or Cedar, or any Powell River street, the lads are out in force, on "Operation Lawn Mower". There is here a sense of friendship, of community life at its best, when the gardeners get together and keep the mowers humming.

The Powell River Company have stepped into the picture this year with a unique award for gardening. As a basis for a major award, the Townsite Department takes an entire block of ten houses. For the block showing the most improvement in front lawns during the summer,

an award of a month's free rent for each of the ten householders will be made. The free rent includes other townsite services, garbage disposal, electricity, etc.

For individual effort, a month's free rent and service will be awarded to the tenant having the best lot in each block. This means that a substantial sum in prizes will be given out in this year's contest.

There is an ample water supply in Powell River and gardeners are not faced with restrictive sprinkling hours as is usually the case in most metropolitan centres.

All of these advantages make for better homes and gardens and an individual pride by residents in the community of Powell River.

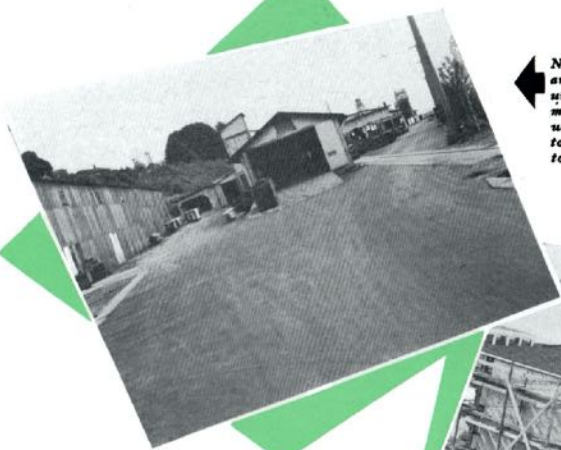
There are many Scots in Powell River. A month's free rent is not to be scoffed at—and the entire block resembles a squad of vigilantes on the look out for a victim—the victim being the fellow who has not kept his lawn up to and above snuff.

With an ideal, temperate climate, the residents of Powell River have plenty of scope—and have turned their town into one of the most picturesque spots on the West coast.


Gardeners in action: (1) Kay Templeton proudly displays the family rose bower; (2) Bill Alton Dick does some weeding; (3) Dick Bledsoe does a bit of spraying.




NEW CONSTRUCTION & MODERNIZATION PROGRAM



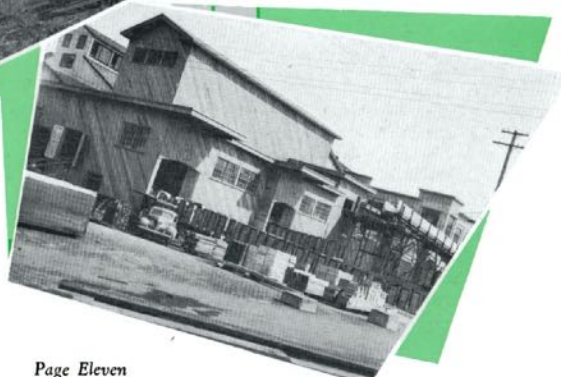
New tarvia roadways to carry our fast mobile equipment are being built and scores of minor modernization jobs are under way as the larger construction projects attain maturity. But, meantime, construction or not, fair weather or foul, the big newsprint machines are working to capacity—and Powell River products are being shipped to our customers as fast as the machines turn them out.



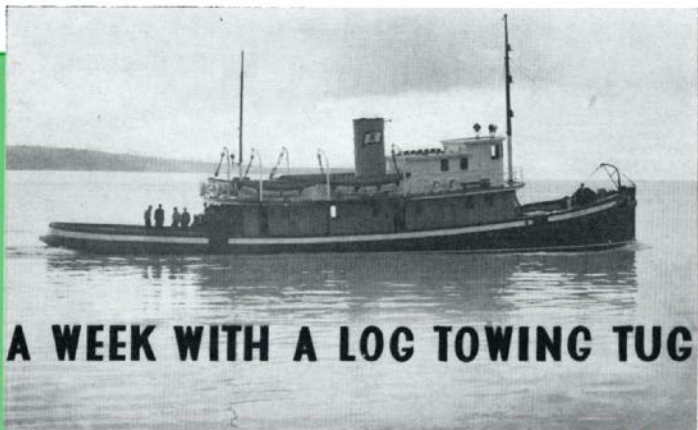
A modern single men's quarters known as "Walnut Lodge", is well under way. Every modern appliance and convenience will be installed, and each room will have wash basin, bureau, spring beds, panelling, etc. Double and single rooms will be provided.



Out at Lois River an addition to the radius-arched Scanlon dam, which will raise the lake level another 20 feet, and harness a total of 44,000 h.p., is nearing completion.



At Powell River, the structural landscape is altering. The new hydraulic barker building has been installed and the new building for the handling of wood and screening chips is approaching the final mile post. Installation of the machinery is nearing completion.



A WEEK WITH A LOG TOWING TUG

The tug "Ivanhoe", one of the fleet regularly engaged in hauling logs to the Powell River log pond.

By A. J. PEARSALL, Assistant Editor "Men and Paper"

A hurry up call from the editor had this reporter at his desk a few weeks ago.

"I want a story of life on a tug boat and what happens on a routine trip," said the boss. "The *Ivanhoe* leaves here tonight to pick up a tow. You're to go along and bring me back a story."

Later that Thursday evening found us scrambling awkwardly down the ladder and aboard my home for the next week.

Making my way past a busy crew getting ready to cast off, I found myself in the wheel house chatting with Captain Ian Caldwell, skipper for this trip.

Three short blasts from the whistle, a jangling of bells, voices calling orders, and the vibration of the engines, soon found us clear of the wharves at Powell River and heading for our destination—Hardy Bay, 142 miles to the north.

Fifteen hours later we entered Hardy Bay and started in making up our tow—12 sections of cedar and 28 of pulp.

"Vancouver Office advises that 24 sections of pulp are ready at Port McNeill," said the skipper, as I joined him in the wheel house.

We left Hardy Bay, situated near the N.E. tip of Vancouver Island, and began our voyage southward. Within a few hours we were barely making headway in the lee of Round Island. Tides, the problem of all ships, particularly towboats, are encountered all through the channels and inlets on our B. C. Coast. After five hours we were away again and into Broughton Strait, then on to Port McNeill to pick up the balance of our tow.

Moving with cat-like skill across the booms, crew members made the necessary couplings, assisted by the *Ivanhoe*, as she manoeuvred back and forth with the respective booms. Our tow was now made up—4 booms wide, each

boom averaging 16 sections in length—a total of 64 sections in all.

With an eye on "the glass" we left Port McNeill at 10:30 in the morning. Nearing Alert Bay, Deck Hand Jack Courtenay routed me out of the galley where Cliff Findlay, the cook, and I were "mugging up".

"Do you want to see something?" said Jack. I followed him on deck, and off on our port side a U. S. destroyer was racing northward to Alaska; not far behind was one of the new Union boats, the S.S. Coquitlam, while dead ahead a fleet of fish boats were crossing our bows on their way to Alert Bay.

The roar of our radio soon had me in the radio room listening to the Alert Bay wireless station giving the latest weather reports. "Winds S.E. 20 to 25, seas choppy," droned the operator.

Chief Officer Buster Fry tapped the "glass" and grunted his disgust as the needle dropped a half point.

Our course was changed to meet the change in weather conditions and we headed into Barnet Pass which lies between Harbledown and Cracroft Islands. A short run up the pass and we tied up again for tides, eight hours this time.

Pushing off again, we soon passed Camp Two Bay on Tournour Island (another of the Powell River Company's booming grounds) and rounded Minstrel Island into Chat-ham Channel.

Taking advantage of the sudden break in the weather, bright and sunny now, the crew and your reporter all went swimming. The icy waters soon chased this party back on board.

We were nearing Johnstone Straits now and headed into Port Harvey to await the slack tide.

On our way again we passed York Island, and through Wellbore and Chancellor Channels.

We will never forget that eventful morning when the cook routed us out at 6:00 a.m. for breakfast.

Coming out on deck we were treated to one of the many awe-inspiring sights so common to our B. C. coast. Surrounded on each side by snow capped towering mountains, a lacy network of puff ball clouds high above, a mist rising from the valleys and slopes and high above in solitary glory a bald headed eagle slowly circled.

We were to have company for a day or so. Two miles ahead of us another tug boat was nursing its tow past Griffiths Island.

As we approached the Island, the waters boiled and swirled as the varying currents held sway. At this point we ran into a brief delay when several logs jumped their boom and the crew put to sea in the ship's motor boat to recover them and tie them on.

Arriving at Mermaid Bay we had a 10 hour wait for the low water slack; so nothing would do but we all go fishing, even Cliff, our cook, came along. Two salmon and cod made up our supper that night.

We pulled away on a favourable tide during the evening and soon passed Stuart Island at the mouth of Bute Inlet. Wind blowing down Bute kept the crew on their toes until we cleared Calm Channel and moved through Lewis Channel.

By morning we passed Teakerne Arm and were joined by the *Scanlon* coming out of Teakerne with a tow for Powell.

Showers and scattered clear patches gave promise of a smooth run the rest of our journey, but Cape Lazo dashed our hopes with their weather forecast of strong westerly winds by noon.

As we approached the Ragged Islands, 20 miles to the north of Powell River, a coastal passenger steamer nosed out from one of the small settlements and headed south.

The Ragged Island shelter was host to seven other tugs when we tied up to await calmer weather.

By evening the wind had died down and each tug was a bee hive of activity as they began clearing the shelter and heading south.

Down in the engine room Chief Engineer Walter Smith and oiler Jack Baillie patrolled their 600 h.p. Union engine, squirting drops of oil here and there, scanning the various gauges for any indications of trouble. The second engineer had turned in for a nap.

On deck one was attracted to the many lights all around, as our floating town of tug boats and their tows moved ahead. Two tugs belonging to the same company joined forces and towed their double boom of logs together.

Tired, we turned in, to be awakened by our tug's whistle in the early morning. Peering out the cabin window we saw the familiar sight of Powell River ahead. The white buildings of the mill glistening in the morning sun and two streamers of smoke rising up from the twin stacks of the mill.

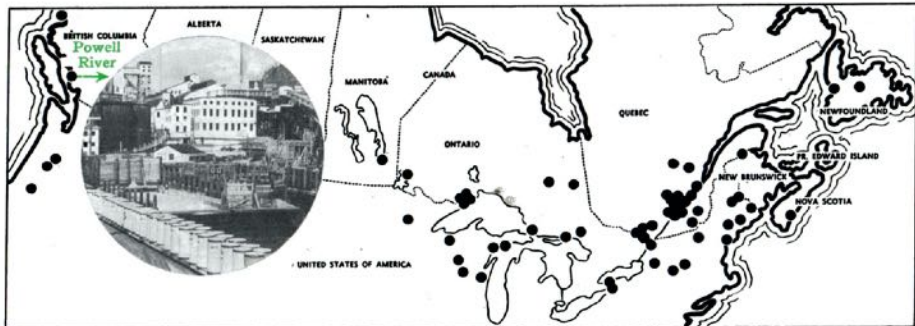
Albert Kennett, the third deck hand, passed by heading for the galley and hot coffee. The clatter of plates soon had me digging in with the others, downing one of Cliff's fine breakfasts.

Shortly a clanging of telegraph bells and the stopping of the engine was my signal to pack up my kit and stand by for landing.

So ended for me a week of thrills, new sights, companionship of fine fellows; to the crew of the good ship *Ivanhoe*—just another trip.



The end of the trip. A sea of logs in the booming grounds ready for mill use.



Map of Canada and Northern United States, showing location of Canadian and American paper mills.

Canada, World's Greatest Newsprint Producer

In 1840, Charles Fenerty of Sackville, Nova Scotia, and Keller of Germany, working independently, succeeded in manufacturing a sheet of paper from wood pulp.

This single discovery revolutionized the future of the pulp and paper industry and provided the propelling impulse which in the years ahead was to elevate Canada to a leading position in the world's pulp and paper industry.

While the art of paper making was practised in Egypt as early as 1700 B.C., it seems almost fantastical that throughout the centuries, the innate curiosity and scientific ingenuity of man failed to discover the utility of wood pulp as a source of newsprint. It is even more fantastic because, until well on into the 20th century, the world had always faced a shortage of paper.

In the days of the early Egyptian dynasties, papyrus, made from the same biblical bulrushes that concealed Moses, was the principal paper stock. The supply, even in the earliest days, was never equal to the demand, and with Egypt holding a monopoly on its manufacture, Rome and the other western nations, searched frantically for substitutes to fill the demand.

Parchment, made from the skins of sheep and goats, succeeded papyrus. But western civilization soon reached a stage when cheaper and more accessible material than parchment was necessary; and in 105 A.D. a Chinese scientist, Ts' Ai-Lun, manufactured a sheet of paper from

bark, tow, old linen and fish nets. From that period on through the middle ages, the Chinese made paper from filtered vegetable fibres.

In 1200 A.D. the paper shortage was still acute, and it is on record that the linen cloths which covered the Egyptian mummies were filched by ravenous paper manufacturers, frantic for new sources of supply.

At the beginning of the 19th century, the paper making process was confined largely to Europe. In Spain 200 paper mills were in operation—and it is probable that their total annual production was little in excess of a day's output from Powell River. In Jaroslav, Russia, one paper mill, with 28 machines and 70 vats, was manufacturing 800 tons of rag paper a year. In Germany 500 mills were in production; and England, since 1665, when the first patent for a paper mill was granted to Charles Hildergard, had several hundred mills on her industrial census.

On this continent, the first paper mill was established by William Rittenhouse, a Dutch immigrant, who set up his establishment near Philadelphia. By the beginning of the 19th century several mills were in operation.

Canada entered the paper making field in 1803. In that year, the first paper mill in the Dominion was erected at St. Andrews, Quebec. The intense rivalry between Upper and Lower Canada in those pre-Confederation days aroused the emulation of Ontario—and in 1811, a William Crooks initiated the second paper manufacturing



The third Rittenhouse Paper Mill, built prior to 1770.

venture in Canadian history. In all these mills and in those of America, rags constituted the principal stock. Rags did not grow on trees and there was always a shortage of raw material.

The first real paper mill in Canada was erected in 1865, with a daily output of one and one half tons. Until the dawn of the 20th century, Canadian development was slow—even with the knowledge that the vast heritage of virgin timber in the country was available as stock. The country was small, with a sparse population. Home building, the rigidities of pioneer life, lack of demand, and the early ascendancy of U.S. production retarded Canadian development. As late as 1890, our total exports of pulp and paper were valued at \$120. By 1910 the value was \$4,464,000 and the new industry, after a late and hesitant beginning, was swinging into the stride which made it a world's champion a decade later.

Up to 1925, the United States, with an annual production of approximately one and one half million tons, was the world's prime newsprint producer. In that year, Canada reached and passed the United States and has forged far ahead in the past twenty years. Production of newsprint in the States has steadily decreased, while Canadian output is now approximately four million tons annually—greater than the rest of the world combined.

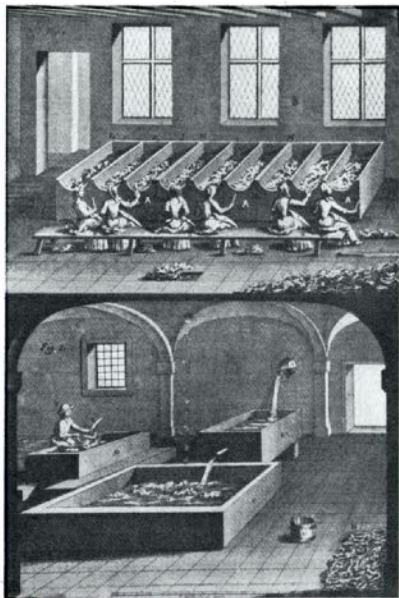
As a direct result of the discovery of wood pulp, pulp and paper is today Canada's largest manufacturing industry. The discovery of wood pulp for paper making has been an important factor in the increase of world literacy. It is perhaps not too much to suggest that the lack of cheap and easily accessible paper stock during the middle ages and well into the 19th century, had retarded the progress of mankind and the surge of free thought and ideas that have made the 19th and 20th centuries veritable beacons in the measured march of human enlightenment.

It is unquestionable that today, newsprint consumption and literacy are complementary. The nations enjoying the highest standards of living are the nations where free

enterprise and religious and political tolerance exist, where compromise and give-and-take are the accepted rules of conduct, where maximum freedom of the individual is accepted and encouraged. And these are the nations which are the largest newsprint consumers—nations in which a free press flourishes and in which educational and cultural advantages are open to all citizens.

The more backward nations of the globe, where freedom is restricted or unknown, where privilege is reserved for the few and where living standards are lowest, are those where newsprint consumption is small.

And so today, Canada as the world's leading newsprint producer, and with great hydro power and timber reserves indefinitely guaranteeing that supremacy, may justly claim that she has helped advance world enlightenment and through her abundance has brought to millions, and will bring to millions more, the freedom and enlightenment that walk with the printed word—the sheet of newsprint or book paper, manufactured from the great softwood forests of our Dominion.



INTERIOR VIEWS OF A SEVENTEENTH-CENTURY PAPER-MILL.
Upper picture shows sorting and cutting of the rags prior to the retting.
Lower picture shows serving the retting-trough.

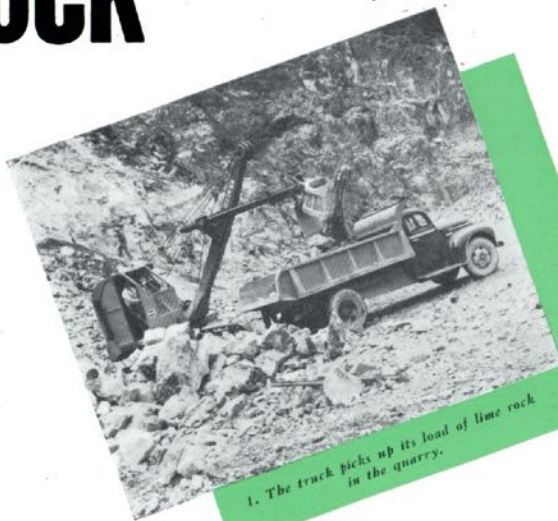
LIME ROCK *used in Paper Making*

Lime rock, which is about ninety-five per cent calcium carbonate, is another important material used in the cooking of sulphite pulp, which forms about 12% of the normal newsprint stock.

Lime rock is used to produce calcium bisulphite, which forms part of the sulphite cooking liquor and helps dissolve the cementing material between the wood fibres—and assists in preventing pulp discolorization.

The lime rock is introduced into the Jensen towers from the top, each piece weighing from 50 to 100 lbs. Water is rained down on the rock from above and cooled sulphur dioxide introduced from the bottom. The sulphur dioxide dissolves in the water forming sulphurous acid, some of which reacts with the lime rock, dissolving it to form a solution of calcium bisulphite in the sulphurous acid. This, in paper mill language, is cooking liquor which dissolves the wood chips into pulp.

Powell River enjoys a unique advantage in the possession of lime rock quarries which are scarcely more than a stone's throw from the plant. On Texada Island,



1. The truck picks up its load of lime rock in the quarry.

about five miles away, are some of the finest lime rock deposits on the Pacific Coast—and these are hauled to Powell River within the hour after loading.

Texada Island is famous in the industrial history of mining in British Columbia. In addition to its lime rock deposits, it has been the scene of many rich gold strikes in the past. In the first decade of the present century such mines as Marble Bay, Little Billy, Copper Queen, Cornell, and Nut Cracker were names to conjure with in the mining world. Copper, silver, some antimony and other miscellaneous minerals have all been mined in the area. There is also an extensive deposit of iron ore (magnetite) on the Island—and this will no doubt be worked in the future. There is still considerable mining activity on Texada and one of B.C.'s oldest companies is undertaking further drilling operations.

It is all surface mining at Texada—and the rock is hauled direct from the quarry to the waiting scow, a few hundred yards away. The Company's own scows haul the rock. Supplies are unlimited and there is no danger of this important material not being immediately available.

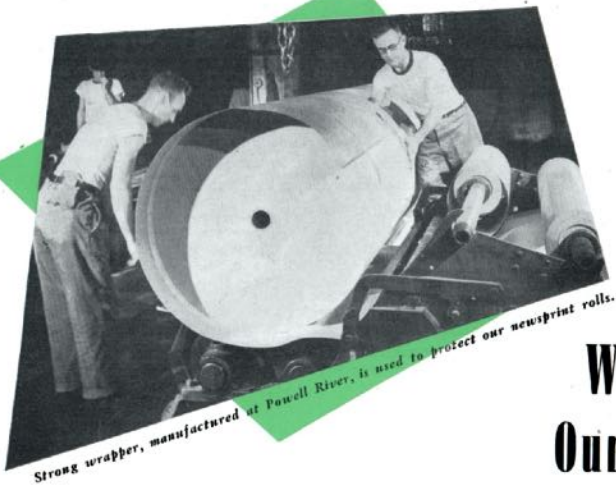
About 1000 tons of lime rock are used monthly in the pulp and paper process at Powell River.



2. Dumping lime rock on scow for immediate transportation to Powell River.



3. At Powell River the jeep carries the lime rock to the Acid Towers.



We Manufacture Our Own Wrapper

By W. F. CRAMB, Beater Room Foreman

While Powell River is famous as a newsprint and pulp manufacturing centre, possibly some people are not aware that we produce a highly specialized wrapper, specially designed for protection of our newsprint. In this outline, we hope to afford DIGESTER readers a glimpse of the various wrapping papers manufactured.

An average of 350 tons of wrapper is produced monthly from pulp screenings. It takes three weeks to build an inventory of screenings sufficient for a week's production of wrapping paper.

The pulps used for wrapping papers are sulphite screenings, groundwood screenings, refined sulphite pulp and sulphite screenings. These screenings are run over a wet machine and made into laps, which are placed in storage until ready for the wrapper run.

The laps are handled by lift trucks and pallet boards, both in and out of storage. When wrapper is being manufactured, the pulp is taken from storage to the beaters, where it is brought back to slush form and the size, dye and alum are added.

The various wrapping papers made for our newsprint are core stock, roll wrapper, roll bands, and softheads.

Core Stock with a ream weight of 325 lbs. is used in the manufacture of cores, for newsprint rolls. These cores are made in the Finishing Room, the core stock furnish being groundwood and sulphite screenings, size and alum.

Roll Wrapper with a ream weight of 280 lbs., after being laminated with asphalt to a 72 lb. sheet of newsprint which renders it moisture resistant, is used for wrapping newsprint rolls. The furnish is refined sulphite and

sulphite screenings, dye, size and alum. The famous purple *roll bands* have the same formulae except for color. Both these wrappers must be tough since they are subject to a lot of handling before arriving at their destination.

Softheads, comprising 100 per cent groundwood, no size or alum, with a ream weight of 280 lbs., are used in layers at the end of the roll which come in contact with the warehouse floor. This provides additional protection for the roll when stood on end.

TREES AND PAPER

(Continued from Page 7)

Pulp from Spruce, Hemlock and Balsam Fir have excellent paper-making properties and the groundwood and chemical pulps (sulphite, sulphate and soda) are suitable for any of the wide range of papers used today, and especially for the world's best all-round newsprint. Hemlock is also renowned for its use in dissolving pulps, i.e., for the manufacture of rayon and cellulose acetates, etc. Douglas Fir is primarily a lumber species, but it also may be used to produce sulphate (kraft) and groundwood pulps. Cedar as yet is only a kraft species.

In British Columbia there are a few hardwoods, Cottonwood, Poplar and Alder for instance, but these are only found in minor quantities and are not in any appreciable use for pulp manufacture.

In addition to the coastal forests in British Columbia there are large interior forests in which spruce and pine predominate. Both are suitable pulping species but as yet the pulp and paper industry has not expanded into those territories.

Report To The Public

An unusual feature of industrial public relations is the annual practice of the Powell River Company management in making a personal report to residents of Powell River on the operations of the company. This is in addition to the published report made to shareholders.

At a recent gathering, President Harold S. Foley and other directors and officials reviewed the activities of the Powell River Company for the past year. The audience was representative of the entire district, and included local

business men and citizens, mill department heads, Trade Union representatives and others.

This commendable practice received special mention in local press editorials and reports; and the policy of industrial frankness on the part of the company has been a tremendous force in cementing the already strong bonds of understanding between the Powell River Company and its employees.

WHAT DOES MANAGEMENT DO?

In an interesting sidelight on management and its position in today's industrial picture, H. S. Foley, Powell River Company president, made the following observations:

Management's first job is to produce something the public wants, at a price the public can pay. There is no exception to this.

The playing rules are clear, too. Management must pay good wages to attract good workers.

It must make a fair profit—to attract investors,

and to assure the continued financial integrity of the business.

It must make a fair profit—to changing conditions—for only a growing business can provide real security for its employees and offer a better prospect for the public.

All this is a large order. It calls for initiative, judgment, a good batting eye.

The scoreboard, over the years, will show how well management has come through.

Neither the men and women in industry nor the money in industry can be effective without good management. Nothing else is so important to the workers' welfare, the investors' welfare, or the public welfare.

A FORWARD STEP

From Powell River "Free Press."

Last Monday afternoon about 150 people, characterized as the district's leading business and professional men, attended a meeting at which the top management of the Powell River Company explained the position of the firm and its plans for the future. It was an interesting and informative session, and gave a lot of people an opportunity they had not previously enjoyed—the chance to see and meet the men who control the destinies of this community.

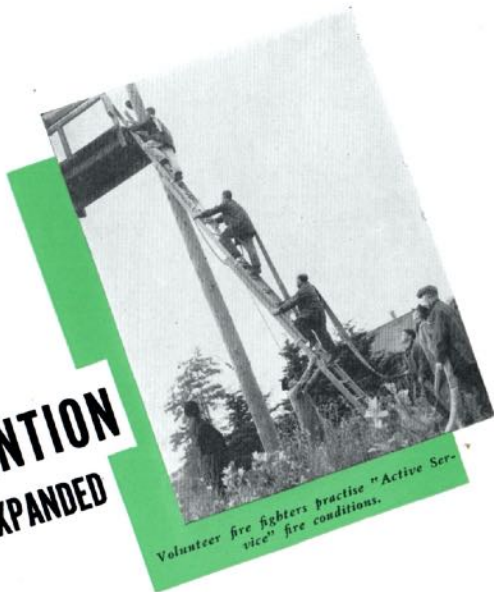
Relations between labor and management are subjects of considerable discussion these days, and we in Powell River are sometimes at a loss to understand the trouble now existing between these groups in other parts of the country. We should not forget—and the statements of leading authorities back this up—that the Pulp and Paper industry has one of the finest labor relations and bargaining procedures in existence today. It may have its bad points and weaknesses at times, but nonetheless it is the best there is, and every effort is being made to make it even better.

That is why last Monday's meeting has some historical significance.

Organized labor, in its bargaining with management, is more and more adopting the theory of "let's see the books" in order to determine the latter's ability to meet demands. This has been greeted with much resentment, even though it is one sure way of settling a point. But here we find a company, of its own free will, laying its cards (or a fair part of the deck, at least) on the table. It is a forward step in the development of labor relations, and one that will be followed, albeit reluctantly, by other corporations in the future. It is another link in the chain of friendship that the Powell River Company is working hard to forge.

Whatever happens, we can be sure that, in the light of present trends, the problems ahead will be met with a spirit of friendship and co-operation that cannot do otherwise than make things better.

FIRE PREVENTION ORGANIZATION EXPANDED



Volunteer fire fighters practise "Active Service" fire conditions.

There has never been a single home in the town of Powell River destroyed by fire over a thirty year period!

This is a happy situation—and is tribute to the highly efficient fire prevention consciousness, which has featured Powell River operations from the beginning.

The Powell River Company, since its inception in 1910, has always maintained its own modern fire department, with up-to-date equipment and highly trained staffs.

Today the Fire Prevention program, in line with modern industrial streamlining is being expanded and strengthened. The Company is now completing the new reorganization, which covers personnel, equipment, and fire regulations.

First, personnel. The Powell River Fire Department's permanent, full time staff consists of a Chief and four drivers, all qualified, highly trained firemen. Immediately supplementing the permanent staff is a crew of 10 volunteer firemen, all Company employees, who reside on the fire hall premises.

These volunteers undergo frequent training for which they receive a regular stipend. They are paid at higher rates when called out for a fire or for tying up ships (this latter job is the business of the Fire Department between 5 p.m. and 8 a.m.).

Volunteer residents have formed a fire hall club with an excellent cook as part of their resident equipment. All expenses are pooled and they pay their pro rata share, at the end of each month. Consequently, with extra pay for calls and training periods, applications to join the "volunteers" are heavy. The standard and qualifications

are high and no employee with less than 18 months service with the Company may apply.

To supplement the regular staff and the resident volunteers, the Fire Chief is organizing an additional volunteer crew of 25 men, who reside in the town and who were former members of the fire department. These men live in their own homes and a certain percentage of them will always be available for special emergencies.

All of them will go through a four months training period, for which the established hourly rate of pay will be allowed—and on fire or boat calls they are treated on exactly the same basis as the regular resident volunteers. With these men trained, and a portion always available for calls, there will be no shortage of trained firemen. The Fire Chief estimates that in an emergency he would have at least 25 men, including permanent staff, resident volunteers, and volunteers, ready at any one time.



Fire Chief Stan Davis (right) with his drivers and modern trucks.

VISITORS

From United Kingdom

Prominent on our recent visitors' list were directors and executives of the internationally known firm, Balfour, Guthrie & Company Ltd., London, England. These included the Honourable Gerald H. G. Williamson, director of Balfour, Williamson & Co., the parent company, and chairman of the Olympic Portland Cement Company Ltd., accompanied by Mrs. Williams, and their son, David A. F. Williamson, M.C.; Mr. William C. Southworth, Vice-President, Balfour, Guthrie & Company (Canada), and Mr. Harold Cove, of Balfour, Guthrie & Company, Vancouver, B. C.

Mr. Williamson, late captain in the 11th Hussars of the famous 7th Armoured Brigade, fought with the 8th Army through Alemein, Italy and Germany. He will join the New York office of Balfour, Guthrie.

Mr. Southworth has been recently transferred from Arequipa, Peru, to Canada.

Our British visitors made a thorough inspection of our Powell River properties and expressed themselves as highly impressed with smooth and modern operations at Powell River. They were particularly impressed with the natural beauty of the surrounding country and with the Company's sound labour relations policy.

From Australia

We received a visit from Mr. L. R. Benjamin, General Superintendent, and Mr. T. N. Carey, Chief Engineer of Australian Newsprint Mills, Boyer, Tasmania. They are on this continent in connection with the purchase of new equipment for the addition to their plant. They are also taking advantage of the opportunity to visit newsprint mills in Canada and our friends from Tasmania thoroughly inspected the Powell River mill. They were most interested in the new hydraulic barker and other recent improvements.

Australian Newsprint Mills are embarking on an expansion program that will double their newsprint output within two years. Mr. Benjamin said: "We are happy

about the enterprise and are confident of the success of the expansion. The newsprint makers in Tasmania have passed through their teething problems and the industry is now an accomplished fact."



L. R. Benjamin

From Eastern Canada



Brigadier and Mrs. J. H. Price

A leading Canadian soldier and industrialist, Brigadier J. H. Price, Vice-President of Price Bros., well-known Eastern newsprint manufacturers, was a recent visitor to Powell River. Accompanied by Mrs. Price, he inspected our plant, with particular emphasis on the new hydraulic barking installation.

Brigadier Price is President of the Dominion Command of the Canadian Legion—and was Officer Commanding the Royal Regiment at Hong Kong in December, 1941. He was captured by the Japs and served three and one-half years in prison camps.

"The Canadians," Brigadier Price asserted, "fought bravely and stubbornly, despite lack of equipment and training. Casualty figures for the Hong Kong attack emphasize this. The defence of Hong Kong was shared by two Canadian regiments, the Royal Regiment of Quebec and the Winnipeg Grenadiers, a battalion of the Rajputs and other Imperial troops."

Brigadier Price went to Hong Kong in November, 1941, to help organize the defences of the Crown Colony and to supervise his regiment's training.

"It was my intention," Brigadier Price ruefully remarked, "to remain only a few months, turn over my command and return to Canada in January.

"But January never came," he concluded.



In these summer dog days, it is something to have the cool, sun-kissed waters of Powell Lake at one's front door. A stone's throw from the heart of town, and scenes like the one above can smooth away the worries of the day, bringing peace and quiet relaxation to residents of Powell River.

The End of the Day

An illustration of Paul Bunyan, a man with a large mustache and a cap, hitching a massive ox to a heavy log. The ox is harnessed with a chain and a long whip. The scene is set in a forest with rolling hills in the background. A circular graphic in the upper right contains the word "Strength" in a stylized green font.

Strength

Paul Bunyan used only straight logging roads. He simply hitched Babe the Purple Ox to them and his tremendous strength straightened them out. When you use strong **POWELL RIVER NEWSPRINT**, you will not have paper running troubles to straighten out.



POWELL RIVER NEWSPRINT

Powell River

DIGESTER



Volume 23

NOVEMBER - DECEMBER, 1947

No. 5



Powell River
DIGESTER

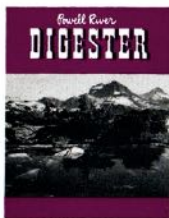
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Editor
J. A. Lundie

Staff Photographer
O. J. Stevenson

Through the pages of this journal we hope to tell our readers about Powell River and its products.



The Cover Picture

In the upper reaches of Powell Lake are spots of breath-taking scenic loveliness. Tiny waterfalls cascading over precipitous cliffs, deep, crystal-clear glacial lakes, snow-clad valleys and picturesque peaks make the country a paradise for the adventurous climber or the active outdoor man.

On our front cover, Oswald Stevenson, staff photographer, pictures one of the small rock-surrounded lakes in the Powell Lake area.

Vice-President of Forest Operations



GEORGE W. O'BRIEN

IN this, the third of a current series in THE DIGESTER, the author presents a brief sketch on one of Powell River's enterprising executives, George W. O'Brien.

George O'Brien, son of Dan O'Brien, a middle western logger, was born in Wells, Michigan, 52 years ago. Shortly after his birth the family moved into the Northwest and settled in Tacoma, where he took his grade school education and found his first job, carrying papers for the old Tacoma Times. Dan O'Brien soon became interested in the logging future of B. C., and later moved the family up to Canada. Once in B. C. it was only natural that young George should follow in his father's footsteps, and during summer vacations he worked in logging camps, picking up the practical side of the business—the hard way! He started in as bull cook, was transferred to woods operations, where he worked successively as chokerman, loader, buckler and high-rigger. Completing high school, he entered the University of Washington, graduating in 1917 with a degree in logging engineering. He then enlisted in the U. S. Army to serve during World War I as a second lieutenant in Field Artillery.

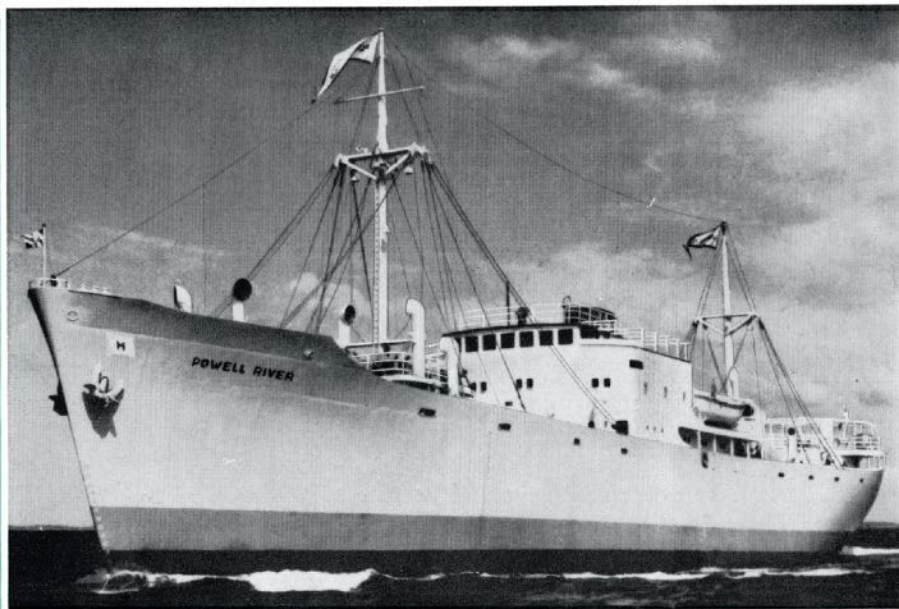
With the war over, George returned to Canada, formed the Broughton Logging Company, commenced logging operations, and it is of interest to note that part of his production went into Powell River newsprint.

On the death of his father, George amalgamated with his father's company to make up the O'Brien Logging Company Limited. For many years this company has operated in timber near Stillwater, site of a portion of Powell River's power development, consequently he has been a familiar figure in and around Powell River for many years.

In 1942, when Powell River Company acquired the O'Brien Logging Company, George agreed to stay on and manage his old company. Subsequently the Alice Lake and Kelley Logging companies were acquired, and these companies were also under his supervision. In 1943 he was made vice-president of the company.

In 1923 he married Gladys McMahon, and they have one son, George, Jr. Since George O'Brien has spent the major portion of his life in the out-of-doors, he early acquired the yen for hunting and fishing, and today these activities remain his only hobbies, apart from a busy executive life.

Today, as vice-president in charge of the company's ramified timber holdings and logging operations, he has an important job. On his shoulders rests the responsibility for an uninterrupted supply of our No. 1 raw material—logs; the "green gold" of British Columbia's softwood forests.



NEW MOTORSHIP "POWELL RIVER"

On the morning of September 15, wharf crews arriving on the job saw a spic and span motorship tied up at their dock. Brightly colored flags fluttered between masts and the bright morning sunshine, glinting against its white sides, brought into bold relief the letters *Powell River* on her stern and bow.

A new chapter in the history of transportation of *Powell River* newsprint had begun, with the arrival, on her maiden voyage, of the M.S. *Powell River*, which has replaced the S.S. *Lutz* on the Powell River-California service.

With a cruising speed of 14 knots, M.S. *Powell River* will speed up transportation of newsprint to publishers in California, with three round trips a month to the San Francisco Bay Ports, and Los Angeles. Built for LEIF, HOEGH & COMPANY by the famous Lindholm shipyards of Gothenburg, Sweden, the new motorship, which will sail under the house flag of the Canadian Gulf Lines, embodies all modern developments of the ship-building industry.

Everything possible was done to adapt the vessel for the transportation of newsprint as she was expressly

contracted and built for the service between Powell River and California.

The ship has four large cargo hatches, equipped with double derricks and the latest type of electric winches. She is powered with a 2-cycle single acting direct reversible Diesel engine; has a maximum draught of 18 feet 11¼ inches, a dead weight tonnage of 3000 tons. She is 302 feet long.

Hatches and holds are clear of stanchions and other protruding objects—an important feature in the elimination of cargo damage. The electrically driven winches and booms can lift from three to five tons.

Navigational instruments are on the same modern scale—and include wireless telegraph, radio telephone, direction finder, Sperry gyro compass with pilot and echo sounder.

M.S. *Powell River* is a modern newsprint carrier, and is probably the only ship on this continent operating such a fast schedule, exclusively in the newsprint trade.

The new vessel is under command of 39-year-old Captain F. Speich, a member of a well-known Norwegian



R. M. Cooper makes presentation to Captain Speich.

seafaring family. Captain Speich, who had a distinguished career with the Mercantile Marine in the war years, and Mrs. Speich will make their home at Powell River.

Colonel William Salman, chairman of the board of directors of the Canadian Gulf Lines, and President Tex Grauer, following their usual custom, accompanied the ship to Powell River on her maiden voyage.

Following her arrival in Powell River, a very pleasing ceremony was observed when Resident Manager Russell M. Cooper presented to M.S. *Powell River* through Captain Speich, a framed aerial portrait of Powell River, on

which was a small bronze plaque commemorating her maiden voyage to this port. Mr. Cooper expressed the Powell River Company's satisfaction over the new service and his appreciation of the honor accorded the company in naming the vessel *Powell River*.

Colonel William Salman estimated that the *Powell River* would transport approximately 70,000 tons of newsprint every year to California ports. Colonel Salman, an expert in loading and transportation, and who was Chief Supply Officer for the U. S. Army in Europe, paid a high tribute to Powell River wharf crews.

CANADIAN NEWSPRINT PRODUCTION

	1947	1946	1945	1944	1943
January.....	370,000	328,414	264,766	242,658	233,544
February.....	341,268	308,382	239,661	240,005	221,807
March.....	372,482	334,127	263,776	252,092	246,855
April.....	369,490	337,862	254,429	236,353	229,573
May.....	384,520	359,943	264,464	262,467	254,046
June.....	355,606	334,207	266,417	246,864	257,845
July.....	379,731	357,027	270,640	244,406	262,323
August.....	377,941	370,676	287,028	262,695	259,612
September.....	366,092	330,063	269,963	244,209	251,827
October.....	396,251	376,436	310,975	258,301	259,336
November.....	364,304	364,304	299,158	256,762	256,336
December.....	341,951	341,951	276,931	244,970	249,693
Total.....		4,143,392	3,259,208	2,991,782	2,982,797
10 Months Totals—1947:	3,713,381	1946: 3,437,137		Increase 8.0%	



A small log enters the barker.

Until recently the utilization of small logs—logs under 12 inches in diameter—has not been feasible in Western pulp and paper making. As a result, much high-grade pulp timber has been left in the woods, simply because it was not economical to take it out.

The installation of the small log barker at Powell River, the first of its kind in Western Canada, has completely changed the picture. This installation can handle little toothpicks 4 inches at the butt and larger toothpicks of 15 inches. To the B. C. logger and sawmill operator accustomed to logs varying in diameter from 3 to 10 feet the sight of a 4-inch butt in his mill is something in the nature of a revolution.

In fact, it is a revolution—and will mean much to the pulp and paper mill operator in the way of wood conservation and logging efficiency.

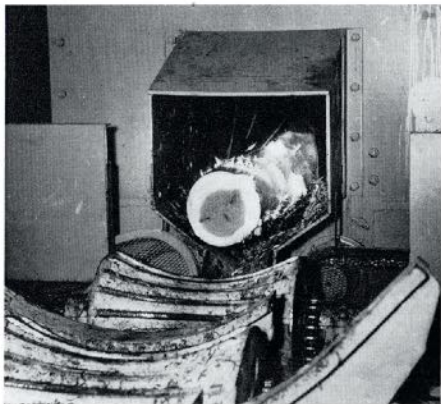
The small log barker is a hydraulic operation and bark is removed by three high-pressure jets. In the small log barking process the sawmill operation, essential for large diameter logs, is eliminated. The logs are carried by special conveyor direct from the log pond to the barker, cut into 8-foot lengths by slasher saws and carried direct to the barker. All logs above 12 inches in diameter are, after barking, halved and quartered in the barker mill before being cut into blocks; and from here they are carried direct to the groundwood machines.

With the small log barker as part of standard mill

NEW BARKER

for SMALL Logs

equipment, practically complete utilization of logging stands can be achieved; and the once useless timber lying in logged-over tracts, salvaged. The installation dovetails into and is another step in the Powell River Company's plans for conservation and complete utilization of its timber limits.



The same log, stripped clean, leaves the barker.

It all happens
in
THIRTY SECONDS

By HOWARD JAMIESON
Superintendent, Wood Preparing Division

I don't believe it. I'm seeing things!

That was the incredulous reaction of a former employee returning to Powell River for a brief visit, during which he took time out for a jaunt around his old working quarters—the Chipper Plant.

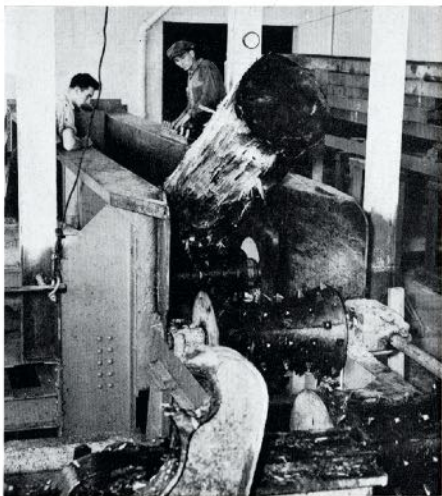
He found these quarters had undergone a complete face-lifting in his absence. He stood transfixed as he watched the new log chipper snatch in one gargantuan gulp a 30-inch log, 26 feet long, and reduce it to chips in the space of thirty seconds.

It was his first glimpse of a modern chipper machine—and the men who worked on the old block chipper will appreciate why he believed he was "seeing things".

The new log chipper, now in operation at Powell River, carries the Company's program of modernization and expansion another step forward. In the "old days", blocks of 8-inch wood, about 32 inches in length, were fed into individual chipping machines. The new operation, in one all-embracing swallow, covers the entire process. The



*Thirty seconds later, this is how the same log looks.
It is now a mass of uniformly sized chips.*



A log on the tilting table, ready for its descent down the chipper chute.

whole log disappears into the chipper and in one half minute, chips are rushing along the conveyor belt to the digesters.

There is no waste, no small butt ends to discard or send to the boiler house. The entire log is consumed, and this means a substantial saving in wood over the year.

Logs for the chipper plant are sorted in the Barker Mill—and from there on it is a one-man operation. The single operator directs the course of the log along the conveyors, and into the chipper chute. It is a highly efficient, economical process.

As the logs enter the narrow, deeply sloping chute, they are tilted endwise on a hydraulically operated tilting table, from which they plummet, express-like, into the cavernous maw of the chipper. Inferno breaks loose for a half minute as the clattering knives go to work on the carcass—which emerges as a carpet of uniform, evenly sized chips. This will contribute definitely to the manufacture of even more uniform newsprint and pulp.

The chipper plant can easily handle the approximately 715,000 feet (BD measure) of timber required daily for the manufacture of sulphite pulp in Powell River, which will furnish the raw material for approximately 225 tons of sulphite pulp each day.

The installation of the log chipper will give us more evenly sized chips, will result in further conservation of our wood supplies, and will very materially contribute to the modernization and efficiency of our operations.

They Come and Go Through the Employment Office



An applicant looks over the vacancies.



Gerry Brennan (right) hires a time-keeper.

By G. A. BRENNAN, Manager

By radio-telephone, telegram and letter the labor orders pour into the Vancouver Employment Office of the Powell River Company each Monday morning. From the Company's logging camps on the five hundred mile distant Queen Charlotte Islands and the more accessible Vancouver Island and Lower Mainland comes the call for high-riggers, chokermen, fallers, donkey punchers and the many others of varying degrees of skill whose part it is to supply the millions of board feet of logs required for the much needed newsprint and pulp. For the mill at Powell River are wanted laborers, tradesmen, and men capable of being trained for the multitude of jobs peculiar to the manufacturing and shipping of the finished product. It is the never-ending problem of the Employment Office to supply these men.

Under present conditions of high wages and shortage of labor of all kinds, turn-over is inclined to be heavy and competition is keen for the services of skilled men. Young men generally are reluctant to leave the cities, even though outside jobs offer much more in the way of opportunity and stability, and a large percentage of all men seem anxious to avoid anything resembling physical labor at almost any cost. Between five and six hundred men pass through the office each week. Some of these are rejected immediately for such obvious reasons as extreme age, alcoholism, physical handicaps, etc. The rest are interviewed, screened, checked and double checked to see if their qualifications fit the job for which they apply, and less than ten per cent survive. A register is kept of suitable men who can be called for specific jobs. A constant check is made on what skilled men are in town on holidays and which ones are ready to go back to work. Everything possible is done to get the best men, but standards must vary to suit the current supply. From all sources an aver-

age of forty men a week are hired, documented and shipped to the jobs. The selection process still goes on after the men are at work, and a history of each man's performance, kept current by regular reports from camps and mill, is maintained as a guide in future hiring.

Transportation of men to the jobs sometimes presents major difficulties. During the summer tourist season transportation of all kinds is crowded, and space is at a premium, and it is often just as hard to get the men to the jobs as it is to find and hire them. The more remote camps are serviced by boat only once a week or less. The traditional logger thinks about going back to work only when his money is all gone, and if a boat is not available immediately he expects the Company, on the strength of his signing a hiring form, to advance him enough money for food, lodging and refreshments until boat day. Unfortunately, some men have taken advantage of this custom to extend their holiday, and special precautions must be taken to see that they get to the job with as little delay as possible.

The Employment Office is well situated to perform the task of locating, hiring and shipping the required men. Vancouver occupies a somewhat unique position in that it is the focal point for labor for the entire coast region and much of the Interior. Men leaving jobs even in the northernmost points return to Vancouver before hiring out again, and the consequent labor pool, augmented by men from every province seeking work in the mild climate, is one of the largest in Canada. The Employment Office staff is thoroughly familiar with the various operations and the requirements of each job, and is fully qualified through experience in handling and hiring men to make the most of the available supply.



AIR TRANSPORTATION INAUGURATED

It was just forty-four years ago, at Kittyhawk, North Carolina, that Orville Wright pioneered the flight of man in a powered machine, the "airplane". The new "sport" came to be known as Aviation. It has come a long way since that time. The old flimsy, spluttery, open-air ship has given way to the modern, highly technical aircraft of today, of scientific design and construction, with four or more powerful engines, and the ability to fly at amazing speeds. And little did the Wright brothers realize that their invention was to foster a new element in the transportation field, the air line, and charter aircraft operator, with facilities for carrying passengers, mail and freight, safely and swiftly, to almost any point on the globe.

Yes, aviation has come a long way in 40-odd years, and it is definitely here to stay. The industry, with the experience and know-how of World War II under its belt, has diversified to the point where today there is an aircraft for almost every purpose, extending from the small two-place job up the scale to the four-seater, the feeder-line or executive transport ship, and, finally, to the star-studded pride of the industry, the four-engine mainline transport aircraft.

Situated as we are here on the fiord-studded West Coast of Canada, heretofore entirely dependent on the relatively slow means of water transportation, and with our all-important raw material—logs—coming from camps spread over a distance of 400 miles or more, our Company has always been air-minded. Many times in the past situations have arisen which called for the use of a plane, and we have been able to meet that demand by hiring an aircraft

from one of the charter operators. During the past year or two such occasions have become more frequent until, last summer, our management came face to face with the realization that our interests required an aircraft to facilitate the carrying on of its far-flung operations.

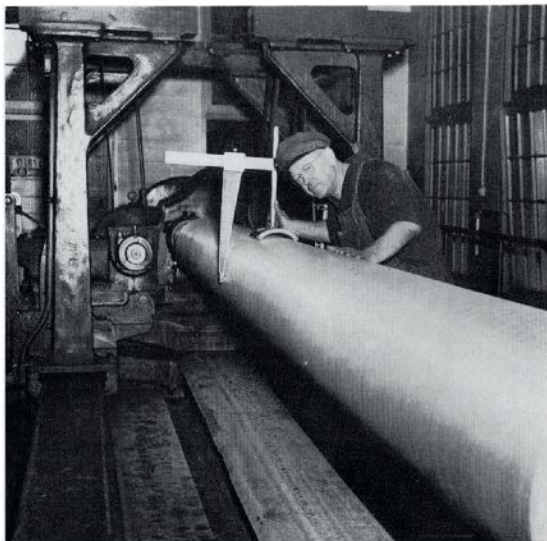
The first problem was to locate and procure the aircraft which would suit the requirements of our peculiar geography. It was felt that an amphibian was the answer, and one was soon acquired through War Assets Corporation, with the result that pictured above is the aircraft, a Grumman Goose, which, during the war, flew in the service of the Royal Canadian Air Force.

The aircraft was manufactured by the Grumman Aircraft Engineering Corporation, Bethpage, New York. Since it is an amphibian, it is equally at home on land or in water. It has a boat type of hull with wing-tip floats. The retractable undercarriage is manually operated by the pilot. It is powered by two Pratt & Whitney Wasp Junior engines, each developing 450 horsepower, which give it a cruising speed of approximately 140 mph. The aircraft has seating capacity for seven passengers.

It is the intention that the Goose will operate between Vancouver and Queen Charlotte Islands, and will provide an air service for Powell River and all subsidiary companies. It will be used in inter-logging camp liaison work, to provide a speedy service to localities not served by commercial air lines; as an ambulance ship in the event of a serious logging accident and in general transport work up and down the coast.

The ROLL GRINDER

By ARTHUR GARDNER
Assistant Mechanical Superintendent



George Higgins, senior roll grinder, carefully checks the roll he is grinding.

IN the modern paper mill there are hundreds of rolls of various kinds and sizes—iron rolls, bronze, granite and rubber-covered rolls—all essential in the manufacture of high-grade newsprint.

Grinding these rolls requires hours of painstaking work—and no roll is removed from the machine until the exact degree of accuracy and “mirror” polish has been attained.

The roll grinder is a highly skilled artificer. He is a specialist, and precision and exactness are essentials in his trade. There is no “approximately right” in his dictionary, no room for leeway. He has to grind his roll within one-thousandth of an inch—no job for the hasty or impatient worker.

In the Powell River plant George Higgins and Bill Heyes are the men who doctor and place back into service the tired or worn rolls from the big machine in the plant.

A big thirty-ton solid iron roll comes in for treatment. At first glance it seems incredible that this monster should bend—but that is exactly what happens to a bottom calender roll under the weight of other rolls above. The bend must be exactly compensated for by grinding a crown on the roll, i.e., making it larger in the centre than at the ends. Hairline precision is necessary to ensure a smooth, uniform surface on the newsprint sheet.

Press rolls, those mighty wringers that squeeze the water from the newly formed sheet of paper, also bend under their load and must be crowned by the roll grinder so that the sheet will be uniformly dry all the way across the machine. Any inaccuracy here can cause wet streaks in the paper and a corresponding waste of steam in the dryers.

Skill, experience and instinct are combined in the real roll grinder. Watch George Higgins cocking his ears sideways like a robin stalking a concealed worm. He is listening for that rhythmic sound that tells him his wheels are cutting, as his steady hands guide the controls. He is making a big contribution to the finished product when he turns a perfect, precisely ground roll back to the machines.

In his spare time, the roll grinder man grinds to razor sharpness the slitters which cut the newsprint to the width required by the various printing presses. After grinding, the slitters are finished with a hand hone to give them the keen edge which makes for smooth, clean-cut rolls of newsprint.

For twenty-four hours, day and night, the giant machines of the Powell River plant maintain a ceaseless hum. Wear and tear on the rolls is necessarily heavy, and to keep our paper up to Powell River standards, they must be removed frequently, reconditioned and set back in the machines.

DYE

USED IN PAPERMAKING

Did you know that bluish purple dye is used to make white newsprint?

This is not amazing when you remember those packages of "bluing" your mother used to drop in the water to make your shirts white, clean and free of tattle-tale grey.

This is exactly what happens in the manufacture of a sheet of Powell River white newsprint. The dye is introduced into the groundwood, mixed thoroughly, and the result is a clean, white sheet of paper.

This is one of the many uses of dye in paper making—to act as a whitening and cleansing agent. But all newsprint is not white. There are various shades, pink, green, peach, used for extra or final editions of your daily paper.

Many of our readers possibly at some time or other have wondered how the various colored sheets of newsprint are dyed and the method followed here in the plant at Powell River. The following affords a brief outline of our color process.

Over the years, Powell River color experts have worked out definite formulae for standard orders which are repeated regularly. The distinct and exact shade originally required was arrived at after exhaustive tests—and the proportions of each dye and other ingredients used were determined. **EXACT UNIFORMITY WAS DEMANDED AND OBTAINED.**

For newsprint the dye is added to the groundwood pulp in a weak solution to prevent mottling, as the pulp for

newsprint has a percentage of unbleached sulphite and should the dye be added to the mixed pulp, it will fix on the sulphite faster than the groundwood, creating a mottling effect which is one of the banes of the paper maker.

Our well-known purple roll band is calender colored. The method of calender coloring is by a box fixed to the calender stack with an apron riding a calender roll. A pump holding a constant head in the box allows the dye to run on to the roll where one side of the paper is colored. This form of coloring is more economical than the dyeing of the pulp, as no dye is lost in the back-water from the machine wire.

Matching of colors, blending the dyes to produce the exact shade required, is done by specially trained and experienced craftsmen. **THE EXACT MATCH IS WHAT THE COLOR MAN STRIVES FOR. SOMETHING "FAIRLY CLOSE" IS NOT GOOD ENOUGH**—and it is here that the trained eye, the skilled hand and that "instinctive feel" combine in the first-class color man to produce **PERFECT MATCHING.**

Finnish Newsprint to Russia

Although Finnish mills are making great strides in the production of newsprint, observers believe that pre-war levels will not be reached until summer, 1948. Some Finnish tonnage is being shipped to Russia in exchange for grain and coal, it is reported.



Courtenay Powell, Sr. (right), walks home from work with Courtenay, Jr.



Bill Hayes, Sr. (top), leaves for work with Bill, Jr., and daughter Trudy.

CHIPS off the old



"GIVE me a call at 6.30, dad, and I'll walk down to work with you."

This is a common request in Powell River, where a large proportion of Company employees are second generation boys, whose fathers work in the plant.

There are hundreds of such lads in our plant today—boys who have been educated and trained in Powell River—and who are following in their fathers' footsteps as paper mill employees.

Encouragement to local boys and sons of employees is on the forefront of the Personnel Manager's agenda. Wherever and whenever possible, it is Company policy to help boys, to encourage and help them to seek and accept responsibility.

It is a policy that has paid good dividends over the years. It is a policy that has invaluable contributed to happy relationships between labor and management: a policy that has helped reduce industrial disputes to a minimum.

During the war, hundreds of our young men travelled about the globe—and found that Powell River, with its comparative stability and security of employment, with attractive wage scales and pleasant surroundings, had advantages which were rarely equalled in more glamorous quarters of the world. Hundreds of these lads returned

to work in the mills of their father and the town of their childhood.

Today, scores of these lads are occupying very important posts in the plant—and scores more are on their way up the ladder. Their homes are here, their interests are here; and after looking over "greener fields", most of them believe the opportunities are here.

The large number of skilled trades operating within a paper plant have attracted local boys—and in these jobs they are given every opportunity for advancement. Practically all our apprentices are and have been sons of employees; and it has been discovered that such boys, with their fathers' example and encouragement, have made high-class tradesmen.

Being a second generation boy has been an important factor in the education of our children, many of whom attend University each year. During the six months' vacation period, the boys invariably return to Powell River, where as a son of an employee, they can obtain work as soon as their studies are finished. Living at home and in their home surroundings they can, under present conditions, save enough to take care of their major expenses at college.

In Powell River we like our second generation sons.

Visitors

"I must say—that Canadian mills have given our position and our difficulties the fairest possible consideration, and I could not ask for more reasonable and decent treatment than we have received. . . . Our experience with them (Canadian manufacturers) has been that they are an honorable and dependable group of men."

William Dunstan, general manager, the Melbourne *Herald* and *Weekly Times*, Melbourne, Australia, wrote these words in 1937.

Recently in Powell River, Mr. Dunstan, who, with Mrs. Dunstan and their daughter, Helen, had flown up from Australia, reaffirmed the statement he made ten years ago.

"It is a pleasure to visit Powell River and see the improvement you have made since my last visit," said Mr. Dunstan. "I was particularly impressed," he went on to say, "with the tremendous expenditures you are making on expansion and modernization of your plant. It gives the publisher a feeling of confidence to see this evidence of faith in the future of your industry."

Mr. Dunstan is the holder of the coveted Victoria Cross, won at Gallipoli, in 1915. While here, he dropped out to Cranberry to exchange reminiscences with Powell River's Victoria Cross winner, Colonel John MacGregor.

From Tacoma, Washington, came one of the West's best-known timber operators, Mr. J. Philip Weyerhaeuser, Jr., executive president of Weyerhaeuser Timber Company, accompanied by Mrs. Weyerhaeuser. Mr. Weyerhaeuser was particularly interested in our new hydraulic barker, which is patterned after their own barker at Longview, Washington, and known as a "Weyerhaeuser type" barker.

It was a first visit for Mrs. Weyerhaeuser, who summed up her impressions of her visit in saying, "I like Powell River. It is a lovely spot."

Mr. H. D. Giddy, chairman of the National Bank of Australia, and senior director of Australian Newsprint Mills Pty. Ltd. of Tasmania, was a recent visitor to Powell River.

Mr. Giddy, accompanied by Mr. P. V. Ramsden, a member of his firm, was returning to Australia after an extended tour of the United Kingdom, during which he met most of the country's leading bankers and financial men.

The Australian financier praised the general soundness of Canadian business methods, and was particularly impressed with the organization of the Bank of Canada, which he felt "represented an ideal combination of state supervision and banking flexibility."

"Naturally," he went on to say, "we in Australia could use more newsprint—lots more—but we understand the problem Canadian manufacturers are facing in attempting to meet an unprecedented demand for paper products. There just isn't enough to go around, but we sincerely



Mr. H. D. Giddy and Mr. P. V. Ramsden



Mr. A. E. Grauer, Mr. H. Boeschenstein and Mr. B. R. Cancell



Miss Helen Dunstan, Mr. W. Dunstan and Mrs. Dunstan



Mr. and Mrs. J. P. Weyerhaeuser

believe you in Powell River are distributing your product on the fairest possible basis."

Two prominent industrial leaders from widely separated locations were among our guests. They were Mr. A. E. Grauer, President, British Columbia Electric Railway Company of Vancouver, British Columbia, and Mr. Harold Boeschenstein, President, Owens-Corning Fibre Glass Company, Toledo, Ohio. Accompanied by Vice-President B. R. Cancell, Mr. Grauer and Mr. Boeschenstein looked over the plant at Powell River, and spent several days inspecting logging operations on the northern mainland and Queen Charlotte Islands.

PASADENA

Phone SY. 3-6111

WEATHER — Low clouds early Tuesday, clearing in afternoon. Continued warm. Yesterday's max. 85, min. 65.

*An Inter
Dedicated to Truth, Fair*

VOL. XV—No. 136

Pasadena, California

Understand you fellows in the far north have a fictional character called Paul Bunyan. Well, men, in the far south we have a factual character known as the Pasadena *Independent*. Like Paul, it, too, is a personality—a prodigious symbol. To recount the tales of Bunyan would require more paper than Powell River produces; to service the needs of the Pasadena personality apparently would do likewise.

Among all users of Powell River newsprint perhaps the most unusual is a scrappy, fearless little tabloid kicking up dust in the shadow of the famous Rose Bowl. And it isn't so little, either. Even though it only comes out four times a week, it is staffed and equipped for seven. Figures prove it to be the biggest little paper in the world.

Pardon me while I slip into Bunyan's boots and take you on an adventure into unbelievable but substantiated fact by cruising through just one phase of this newspaper—its classified advertising, than which nothing more fantastic can be conceived.

On a sultry day in the early thirties a prominent but sad-faced local real estate operator walked into the editor's office. His eyes had that distance-conscious look of a man hanging to a precipice by his cuticles.

"May I close the door?" he asked.

"It's not our policy to close doors," replied the editor.



CAN YOU SPARE A DIME

Busted. Licked. As a last resort, if you'll pardon the expression, I'd like to try your paper. I would like to run three 30-cent classified ads."

"Then forgive me if I speak in a low voice."

"What's on your mind?"

"I want your newspaper to trust me for ninety cents."

"Ninety cents? For what?"

The man pushed his hat to the back of his head, flopped in a chair and ran a damp hand over a damp and fevered brow.

"I'm broke. Flat broke.

Apparently the editor forgave the expression, because the first ad appeared the next day. The Pasadena *Independent* is famous for its classified results. On the first 30-cent ad the sad man turned a \$5000 real estate deal. The second 30-cent insertion brought him a \$225,000 deal.



WE'LL TAKE IT

His kids stopped going barefoot, he rejoined his golf club and his wife bought a mink coat. What happened on the third ad didn't interest us. All we know is that the man is back in the chips.

Any daily newspaper in the United States capable of averaging three million lines of classified advertising a year is considered exceptional, if not slightly phenomenal. The Pasadena *Independent* ran better than five and one-half million and, pardon your Bunyan, comes out not daily but only four times a week. This figure (5,600,972) tops every metropolitan tabloid daily in the world!

To further disparage your lethargic logger, the paper has sold through its amazing classified columns, a grand piano in Nicaragua, a used Ford to a reader in Paraguay, and a rotary newspaper press to a subscriber in Manila. As far as we know we have never sold an open grave to a zombie or a warm neck to a vampire bat. But we could if they'd advertise.

To what ends the *Independent's* classified columns would stretch if newsprint were available, even its publishers hesitate to guess. Real estate ads, which at one time were allowed to run to indefinite lengths, now are limited to four inches; help wanted ads to one inch. Because of the rush, voluntary copy (incidentally 32 per cent of all this classified is voluntary) is restricted to a maximum of four lines, beginning at 9 a.m. on press days and closing at 2 p.m. On these days telephone girls sell their quotas by 10 a.m., and are through for the day.

The four weekly issues of the paper are held to 25 pages of classified on Sundays, 17 on Tuesdays, 19 on Wednesdays, and 21 on Fridays.

INDEPENDENT

Los Angeles Phone RY. 1-6275

Progressive Newspaper
Play and Community Betterment

5c Per Copy on Sale
at Newsstands
Home Delivery
Three Months \$1.20

Los Angeles, Tuesday, August 26, 1947

34 North Raymond Ave., Zone 1

By F. G. RUNYON, Editor

No debutante has approached a status of social popularity to compare with the fawning coquetry of newspaper publishers toward anyone connected with a paper mill. There isn't one of us who wouldn't spread his best coat over a puddle to protect the dainty pinkies of a Powell River charwoman.

Used car dealers were a persistent problem. They kept wee hour vigils on the pressroom, followed distributing trucks in a procession reminiscent of a poor man's dawn patrol trying by every hook and crook to secure early copies. In the end they exhausted each other and mutually agreed not to ring doorbells or telephone advertisers before 6 a.m.

"I would give \$5000 in cash for a copy of the galley proofs of the Pasadena Independent's classified section just one hour before the paper hits the streets," one Glendale used car dealer remarked.



What is the secret of this success? What type of business magic has been performed capable of making a paper publish in four issues a week more classified advertising than any tabloid in America can muster in seven?

The answer lies in several things. First, our paper has a singular personality which gives it a high reader interest. It was founded by F. F. Runyon and Emer D. Bates, who sealed their partnership with no more than a handshake. It is editorially independent and utterly fearless. Its readers believe in it because nothing is said that isn't meant and nothing promised unless it is delivered. This then may be considered the initial impulse, but it doesn't explain why such unusual reader concentration should throw a burning focus on the classified section.

It was the opinion of both the editor and publisher that

classified advertisements are charged with news value. This news value was exploited. In every issue and on every classified page two-column sprightly written box stories appeared containing interesting result stories.

Other articles urged readers to clean out their attics, their garages, their closets and to advertise the accumulated articles for sale rather than discard them. It was pointed out that someone somewhere might be willing to pay for the very item another person would throw away.

A typical story might recount the experience of a Mrs. McMurtry who advertised an old flatiron, two broken bridge lamps, a wire mattress and a doll buggy with one wheel missing. It was Mrs. McMurtry's intention to hire someone to cart the junk away. Instead, before 9 a.m. of the morning her ad appeared she had received fifty-five calls, sold the whole works to a man who was building a desert cabin and finally had to leave her own home before noon because continuing telephone calls were driving her nuts.

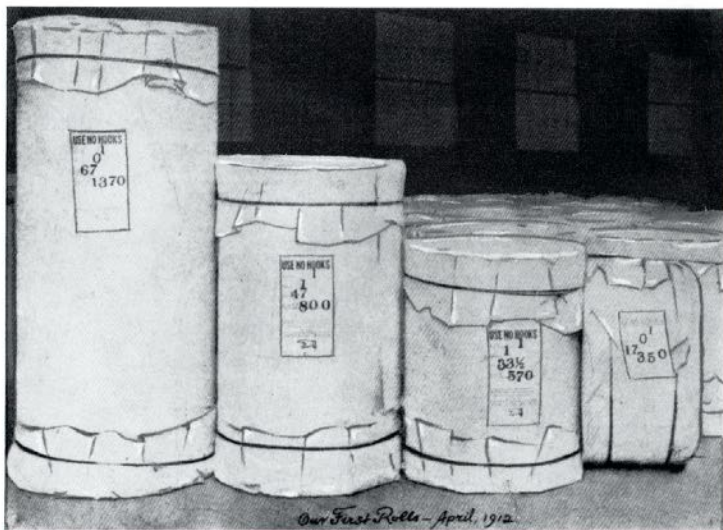
Repeated editorial emphasis on such happenings along with proof positive that they occurred, focused reader interest on the Independent's classified section until today it has become an amazing market place for more than a quarter of a million people in southern California. There was nothing freakish nor accidental about it. On the contrary, the phenomenon was intelligently planned and efficiently executed.

Paul Bunyan might find it difficult to achieve as much with no more than a warm handshake.



SUCCESS-

OUR *First* ROLL OF NEWSPRINT



THIRTY-FIVE years ago, in April, 1912, there was an air of tense excitement on the old wharf at Powell River. Scores of residents, employees, and a number of visitors thronged the approaches—and all eyes were focused on the thread of railroad track leading from the mill to the wharf.

Suddenly, a simultaneous murmur, "Here it comes"—and out of the railroad tunnel stamped two stout work horses, behind them a train of flat cars loaded with newsprint rolls.

The horses, conscious that they were making history, clumped along heads up, as spectators broke into a scattered cheer. The train proceeded along the dock, between lanes of spectators—the loading crews went into action—and in a few minutes rolls were slung aboard a waiting freighter.

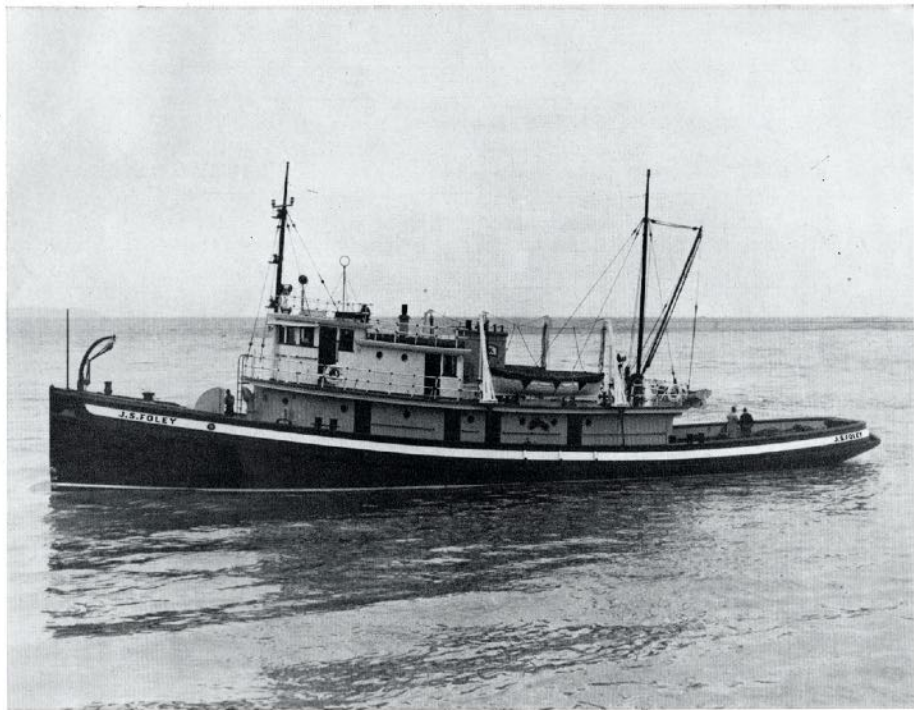
A new industry had been born—and the crowds that thronged the wharf on that historic day saw the first roll of newsprint ever manufactured in British Columbia start its journey to the publishing houses of the world. Not until five years later was British Columbia newsprint manufactured outside the port of Powell River.

Two years of steady, often feverish, sometimes heart-breaking work preceded this climax on the Powell wharf in April, 1912. The art of paper making, the know-

edge of construction problems well in their infancy as far as Western Canada was concerned. When the late Dr. Dwight F. Brooks and Mr. M. J. Scanlon and their associates expanded from the lumber to the pulp and paper business they were breaking a new trail; and inevitable delays, disappointments and distractions were bound to be along the route.

Nor was the future so cheerful 36 years ago as it is today. The great spectacular advertising era which began in the "twenties", and which almost overnight threw Canada into first rank as a newsprint producer, was still behind the curtain; markets were not over plentiful, and competition was sharp. But courage, vision and sound groundwork triumphed—and the 100-ton mill which sailed bravely out into the world in 1912 is now a 750-ton plant, sending the Powell River trade-mark to the ports of the seven seas.

Today there are still users of Powell River newsprint who ran these first rolls on their presses—and who have travelled the newsprint trail with Powell River for over thirty-five years. In that time, by research, by experimentation, by trial and error, we have left no stone unturned to justify our pride in being British Columbia's first newsprint producer—and to place on the publisher's doorstep the best quality newsprint that modern science and know-how may produce.



M. V. "J. S. Foley" — New Tow-Boat

An addition to the Kingcome Navigation Company fleet, the new M.V. *J. S. Foley*, went into operation in September. The new tug is named in honor of the late Mr. J. S. Foley, father of Harold S. Foley, President of Powell River Company.

Formerly the L.T. 496 of the United States Army, Department of Transport, she was built by Minneford Yacht Yard, City Island, New York. Launched in November, 1944, the tug was finally placed in service in August, 1945, in the New York harbor area. She was de-commissioned in October, 1945. Extracts from the log of the L.T. 496 show that her main engine had only operated 420 hours.

Purchased by Kingcome Navigation Company in April, 1947, the tug was put into running condition under the direction of Floyd L. Kurtz, Manager of Kingcome Navigation. She sailed from New York at noon on May 24th under Captain John McQuarrie. Cal Green, Jim London and Gordon Craig, all senior officers of the Kingcome fleet, were members of the crew. The voyage from New York to San Francisco via the Panama Canal took 21 days, during which time the boat averaged a speed of $11\frac{1}{2}$ knots.

At San Francisco the tug took in tow four barges, surplus U. S. Navy, arriving in Vancouver July 4th. Since that time the boat has undergone a complete overhaul.

Her hull is of oak and fir construction, 126 feet in length, with a breadth of 28 feet and draft of $13\frac{1}{2}$ feet. All auxiliaries, including the anchor winch, are electrically driven. She is fitted with an exceptionally heavy towing winch which carries 1800 feet of inch and three-quarter steel tow line. Her main engine is an eight-cylinder Superior Diesel engine, developing 1200 brake horsepower.

Her normal complement of ten men has modern, well-appointed quarters, and the galley is a "cook's dream".

The *J. S. Foley* will be engaged in towing of Davis rafts from the Queen Charlotte Islands and other coast points. The Kingcome fleet now comprises five tugs and 12 scows.

New Scows

Recent additions to the Kingcome scow fleet include one covered scow, one open scow and one steel barge, which will be fitted out as a paper barge to carry 1,000 tons of newsprint.

TESTS! TESTS! TESTS!

By DON MCLAURIN, Control Superintendent

It is only within recent years that the paper industry began to do something about the increasing need for greater technical control if consistent high quality and greater speed of operation were to be attained. Up until this time pulp and paper making was more or less by guess and by gosh, and little had been done to apply what was known about wood fibre or to learn more of the components of our product.

In the mill at Powell River, the only routine test carried out at this time was a freeness test on the groundwood pulp. In an effort to meet the challenge facing the industry in general and our plant in particular, a tall, serious young man stepped off the S.S. *Charmer* and set to work to see what improvements could be made. Harry Andrews commenced to lay the foundations for a practical realization of his dreams of what the Control Division should be. More information and more rigid control were apparent needs, and one of the first steps was the construction of the old Control Laboratory in the Beater Room. Testing was increased to take in chip analysis, strength tests on both groundwood and sulphite pulp, per cent sulphite in the mixed stock, moisture in paper and other routine work.

From this start back in 1920, the Control Division has progressed and expanded in step with the trade, steadily contributing its share to the industry's advancement and to maintaining Powell River products in top quality brackets.

This maintenance of standards necessitates constant information on the quality and condition of all our raw materials as well as constant checks on our product as it goes through the various stages of manufacture. This information is gleaned in part from the departments involved, partly from results of tests done as a routine by pulp and paper testers, and partly by the technical staff who also tie in all the bits and pieces, interpreting the answers.

Routine testers are main-

tained in the Groundwood Mills, Beater Rooms and Paper Machine Rooms to do specified tests on the pulp and paper as it is made. Control testers and sulphite pulp testers do more advanced testing on the pulp and paper in the Central Laboratory, and the whole is capped by a staff of engineers under the leadership of the Control Superintendent.

WOOD

What wood shall or shall not go into pulp is decided at the sawmill and chips are checked for bark, knots and cleanliness in addition to size by testers at the laboratory.

LIMESTONE AND SULPHUR

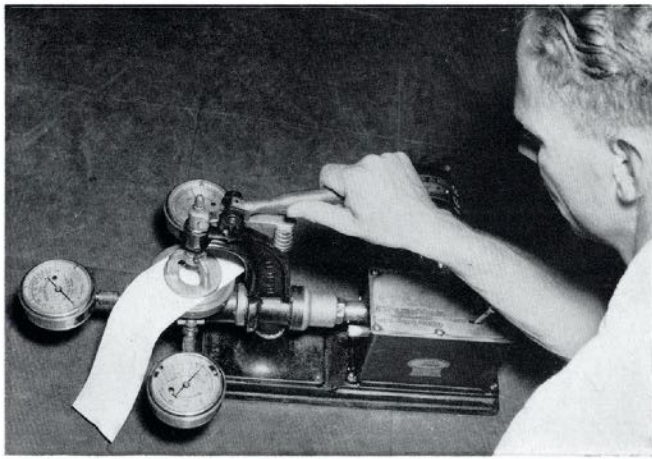
Limestone and sulphur supplies are analyzed and checked by the laboratory staff to ensure that they select the best quality standards necessary for the manufacturing of our newsprint.

COOKING LIQUOR

Cooking liquor strength is carefully controlled by the acid makers and the cooking staff gauges the extent of their cooking from a permanganate test done on each batch.

SULPHITE PULP

Sulphite pulp is tested for consistency before it leaves the Screen Room and again when it arrives at the Beater



In the laboratory, tests are taken for strength, moisture content, uniformity, etc.



The groundwood tester takes a pulp sample.

Rooms, so that the right proportion of the sulphite and groundwood stocks may be mixed. Finally, at the Laboratory, it is tested for strength, bleachability, processing reaction, dirt content and brightness.

GROUNDWOOD PULP

From the individual grinder pit right up until it is pumped to the Beater Rooms round-the-clock testing is carried out on the mechanical pulp for freeness and consistency. In addition to this work, the pulp is tested at the laboratory for strength, freeness and brightness.

BEATER ROOMS

When the two pulps reach the Beater Rooms to be mixed in the desired proportions, consistencies are done on the pulps and the per cent of sulphite pulp in the mixture is determined. Color is controlled by frequent testing with precision equipment.

MACHINE ROOMS

Regular tests continue when the stock comes on to the machines. Consistency and temperature are done at the head box, press tests are done at the presses to determine the distribution of moisture across the sheet at this point and to check the efficiency of the presses. At the dry end,

the paper tester goes to work, testing the paper from each reel of thickness, basis weight, strength, moisture, moisture content and formation. If the paper does not come up to standards set, he must hold the paper for inspection by the paper inspector, who decides what shall be done with the paper in question. Samples go to the laboratory from each reel, and from these, dirt content, clay filler retention, brightness tests and paper inspection tests are done.

LABORATORY

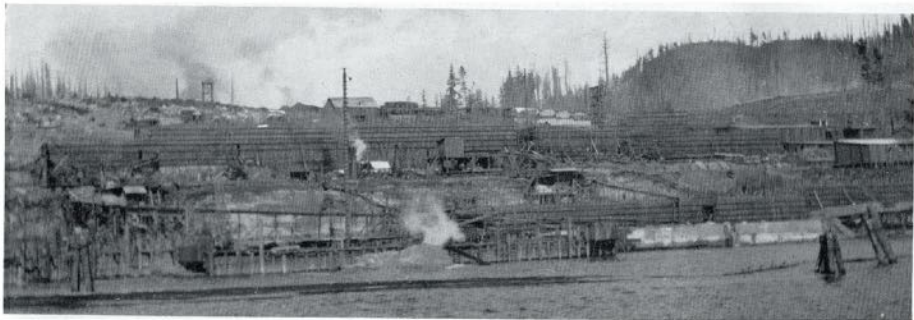
Over and above the mentioned tests are numerous routine tests, such as core strength, wrapper strength, glue tests, fuel oil tests, experimental research on various types of grindstones, water investigation, and many others.

Specific and rigid tests are made in all departments, providing information for operators, guaranteeing that raw materials are up to specifications. Something over 1600 individual tests are done in a 24-hour period, which means that in the time taken to read this, between three and four tests have been completed.

Neighbor—Where's your brother Freddie?

Boy—He's in the house playing a duet. I finished first.

The first CHRISTMAS in POWELL RIVER



Construction in December, 1910.

Thirty-seven Christmases have sped by on the swiftly revolving wheels of time—thirty-seven chubby, red-cheeked gentlemen in flaming red coats and great white beards have squeezed puffingly down our chimneys to pay their annual visit to our children—since construction workers notched the first tree on the site of the Powell River that was to be.

The festal season, the approach of Christmas and New Year, has always been observed in time-honored and vigorous fashion in Powell River. It has been a season of parties, of concerts, entertainments and general exuberance. It is no exaggeration to state that for its size and population, Powell River has more than a passing knowledge of how Christmas should be spent and how the New Year should be ushered in.

Back in that first Christmas of 1910, only a few shacks had been constructed. The town had not yet effected the transformation from a logging settlement to a permanent size. But one important building—a “must” even in the hastiest of construction work—the cookhouse stood strong and firm in the centre of the settlement.

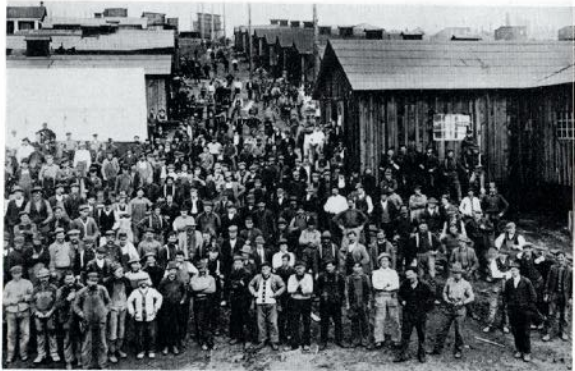
And it was to the cookhouse that the “residents” of Powell River repaired for their first Christmas. It wasn’t stylish, maybe, but for lustiness and boisterous exuberance that first Christmas set a pattern that has been rarely equalled, never excelled.

It was the focal point for the several score workers who didn’t join the great exodus to Vancouver. On the testimony of living witnesses, spirits flowed like water before and after the Big Dinner, set for 5.00 p.m. Christmas carols were sung, and all the favorites of those days, “Daisy”, “Sidewalks of New York”, and the Ukrainian, Russian, Serb, Swede and Danish national anthems, mingled with “My Country”, “Tis of Thee”, “The Maple Leaf Forever”, and “Scots Wha Hae”.

Somebody collected a clarinet; a kid that could handle the music box was found; and with a few mouth organs tossed in on the side, mirth and melody really reigned.

There were very few women around on this first Christmas—and there is some reluctance to go into elaborate details on the ones that attended. But they did have a dance, with no holds barred and shoes on a catch-as-catch-can basis. With “Turkey in the Straw” as the most popular selection of the day, the girls were shared up—and believe it or not—the cook, who was the chief bouncer, came out of the fray intact.

Practically every soul in the construction camp—and that’s all there was—were collected in the cookhouse on that memorable day. The only ones missing were those who lost interest in the proceedings around three o’clock in the afternoon. And most of these were time-keepers, or other frail creatures, who weren’t used to the kind of competition they met at this international Christmas feast.



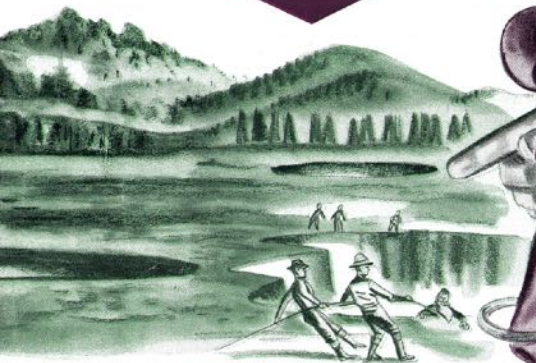
The boys await the Christmas Dinner gong.



HERE the bow of the motor vessel *Powell River* is facing the town of Powell River for the first time. We hope that the good ship will have many successful voyages with cargoes of Powell River newsprint.



Strength



A boy fell in one of the hoofprints of Babe the Purple Ox. It took fifty years to get him out and he had a beard three feet long.

Use **POWELL RIVER NEWSPRINT** for the long pull.

POWELL RIVER NEWSPRINT