



Producer

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Keeping Christmas Around PM (Pages 2 & 3)

Keeping Christmas Around PM

Keeping Christmas

It is a good thing to observe Christmas Day. The mere marking of times and seasons, when men agree to stop work and make merry together, is a wise and wholesome custom. It helps one to feel the supremacy of the common life over the individual life. It reminds a man to set his own little watch now and then by the great clock of humanity which runs on sun time.

But there is a better thing than the observance of Christmas Day, and that is Keeping Christmas. Are you willing to forget what you have done for other people and to remember what other people have done for you, to ignore what the world owes you and to think what you owe the world, to put your rights in the background and your duties in the middle distance and your chances to do a little more than your duty in the foreground . . . to close your book of complaints against the management of the universe and look around you for a place where you can sow a few seeds of happiness. Are you willing to do these things even for a day?

Then You Keep Christmas



Erie Mining Company—Departmental parties are part of the Christmas observance at Erie Mining Company. Office employees socialize and enjoy Christmas goodies in a festive atmosphere.

Are you willing to stoop down and consider the needs and desires of little children, to remember the weakness and loneliness of people who are growing old, to stop asking how much your friends love you and ask yourself whether you love them enough . . . to bear in mind the things that other people have to bear in their hearts, to try to understand what those who live in the same house with you want, without waiting for them to tell you? Are you willing to do these things even for a day?

Then You Keep Christmas

Are you willing to believe that love is the strongest thing in the world, stronger than hate, stronger than evil, stronger than death; and that the blessed life which began in Bethlehem over nineteen hundred years ago is the image and brightness of the eternal love?

Then You Keep Christmas

And if you keep it for a day, why not always?

Henry Van Dyke—1852-1933
American clergyman, educator, and writer.



Milwaukee—Office yule decorations are part of keeping Christmas at PM's Milwaukee Solvay Coke Co. Division. Here's how secretaries Mrs. Ann Marie White and Miss Lucy Schwartz decked out their offices in 1966.

On The Cover

Hancock, Michigan—At Portage Coal & Dock Company, a lighted Christmas tree of pipe, fashioned by dock employee Joseph Julio, with assistance from George Gill, Jack Masters, and Ben Koskiniemi, shines out in the night from the boom of the dock's coal hoist crane. We chose this scene for our Christmas cover photo because it aptly symbolizes industrial observance of Christmas.



Hoyt Lakes, Minnesota—Erie Mining Company employee Jerry Frey and his family build a large snowman Santa Claus in front of their Hoyt Lakes home each year. Here is their 1966 effort.



On the Lakes—The Interlake Steamer Frank Purnell sports a lighted Christmas tree on the end of its boom. (See our story on the Purnell on pages 10 and 11 of this issue.) Crewmen tell us First Mate John Cummings deserves the credit for the ingenious wire bracing that enables the tree to resist the strong Lakes winds. —Photo by Jim Pratt



Cleveland—Chairman John Sherwin and President K. S. Benson at the rostrum during the 1966 Cleveland Office employees' Christmas meeting. Occasion was Mr. Sherwin's receiving his 25-year PM Service Award.



Tasmania—Meals provided for construction workers at Savage River Mines are a source of pride for Chef Josef Tamas (left) and his staff. The 1966 Christmas menu included roast turkey, ham, pork or beef, with Christmas pudding and brandy sauce, and perhaps more appropriate to the Tasmanian summer climate, fruit salad and ice cream. Chief Engineer Monte Skomars and his wife Toinie (center) received the best Christmas present of all in 1966—a visit from their daughter, Mrs. R. E. Dreher, of Duluth, Minnesota; holding an

Australian kangaroo skin bag in our photo. Under the Christmas tree (right) at the home of Don and Ruth Virant (Don is operations manager at the Savage) are Carol and Betty Virant, Patricia and Kathy Kuchta, Pat, Jeff and Tim Virant, and Doug Kuchta. Bill Kuchta, chief development engineer and pit superintendent, and Don Virant brought their families to Tasmania from Minnesota in 1965 when the project was just getting under way.



Cleveland—Highlight of Cleveland Office employees' yearly Christmas meeting is the performance of the PM Choraleers, under the direction of Maynard Elliot, assistant manager of ore traffic. In addition to carols, the Choraleers sing a traditional "parody," a

takeoff on a popular tune, filled with humorous references to PM happenings during the year. Senior tax accountant Virg Droll has authored this eagerly-awaited item for the last few years.

industry notes

COAL A GROWTH INDUSTRY

According to a National Coal Association spokesman, financial analysts now regard the coal industry as one of the major U.S. growth industries. 1966 was the industry's best year in the past two decades, with a total production of 534 million tons.

FAVOR MONDAY HOLIDAYS

In a poll conducted by the U.S. Chamber of Commerce, 85% of those responding said they favored changing the dates of five national legal holidays to fall on Mondays. Supporters of the bill believe workers as well as business would benefit by having more holiday weekends. Christmas and Easter would not be affected by the measure.

IRON-AIR BATTERIES

A major industrial research laboratory announced that it has developed an experimental battery using an iron electrode and oxygen from the air to produce about six times as much power per pound as conventional lead-acid batteries. The announcement said that several years' development work remain to be done before the device can be used as a practical power source.

COLD PELLETS

A Swedish company will put on stream a plant that produces iron ore pellets without heat. The cold pelletizing process uses a conventional cement to hold the pellets together.

CANNED POP'S THE THING!

Sales of pop in steel cans are bubbling up toward the 7.1 billion can mark this year—1.5 billion more than in 1966. The American Iron and Steel Institute estimates per capita consumption of canned pop in the U.S. this year at 37 cans per person, compared with 30 last year. (Need we mention the basic raw material used to make a steel can?)

BIGGER UNIT TRAINS

Unit trains, which over some routes compete with Lakes shipping, are getting bigger. The longest and heaviest train ever operated by an American railroad recently pulled 450 loaded coal cars (about 3½ miles long!), using eight locomotives and a crew of four men, over 50 miles of West Virginia track in 1½ hours.

Acquisitions Broaden PM Horizons

In November PM announced plans for the acquisition of The Carbon Limestone Company, Lowellville, Ohio, and Henry Bower Chemical Manufacturing Company of Philadelphia.

The acquisition of Carbon Limestone is subject to approval of that company's stockholders and to receipt of a favorable tax ruling. This acquisition is expected to be completed early in 1968. We hope to be able to publish more information about Carbon Limestone in our next issue.

Arrangements for the Bower transaction were completed shortly after the announcement. Bower, a privately owned firm throughout its 112 year history, is operating as a subsidiary of PM under its present name and management.

Oriented since its founding toward organic and nonferrous inorganic chemistry, the Bower organization is best known as one of the nation's oldest and largest distributors of industrial anhydrous ammonia. It also produces a broad range of other chemical products including various cyanates, substituted ureas, and halogen salts.

The acquisition of Bower Chemical is a major step in the expansion of PM's activities in the chemical industry. Manganese Chemicals Co., a division of Pickands Mather formed in 1952, produces the widest range of manganese chemicals and compounds in the world; it also produces hydroquinone for the rubber and photographic industries, and manganese metal in massive form for use in alloy steelmaking. This division's experience in ferrous chemistry, coupled with Bower's long record of success in nonferrous chemistry, will enable Pickands Mather to offer a highly diversified line of organo-metallic and organic chemicals.

Both Bower and Manganese Chem-

icals are equipped with the modern research and processing facilities required to produce this specialized family of high-purity chemicals. The plants of both firms are ideally located in relation to their raw material sources and markets. Bower's headquarters is on the banks of the Schuylkill River in Philadelphia and Manganese Chemicals' three plants, all built since 1962, are in Baltimore and Kingwood, West Virginia.

F. R. Dykstra, a vice president of PM and president of Manganese Chemicals, stated that the new subsidiary should have the effect of increasing PM's chemical sales to a total of \$12 to \$14 million during the coming year. He also emphasized that the Bower name will be retained because of its long history and reputation in the chemical industry.

The firm was founded in 1855 when Henry Bower, a young graduate of the Philadelphia College of Pharmacy, opened a shop as a broker in drugs and chemicals. Three years later, he began manufacturing chemicals in a small plant in southwest Philadelphia. His first two products, pure inodorous glycerine and ammonium sulfate, were dissimilar in nature and use but had one thing in common. Both were processed from waste materials: glycerine from the waste product of stearine candle factories and ammonium sulfate from the condenser and washer liquors of the local gas works.

Mr. Bower's pioneering efforts in the conversion of by-products into useful products played an essential role in the company's growth and diversification. It also led to his recognition as a leading spokesman for the American chemical industry. In 1880, he was instrumental in convincing the U.S. Census Bureau to report the statistics for the chemical industry as a separate branch of manufacturers—a practice that has

been maintained ever since.

At the time of his death in 1896, the Bower name had become synonymous with leadership in the production of ammonia, ferrocyanides, and chromium chemicals. Although continual research and new market demands have substantially broadened Bower's product line since then, the company continues to supply a number of the products developed by its founder almost a century ago.

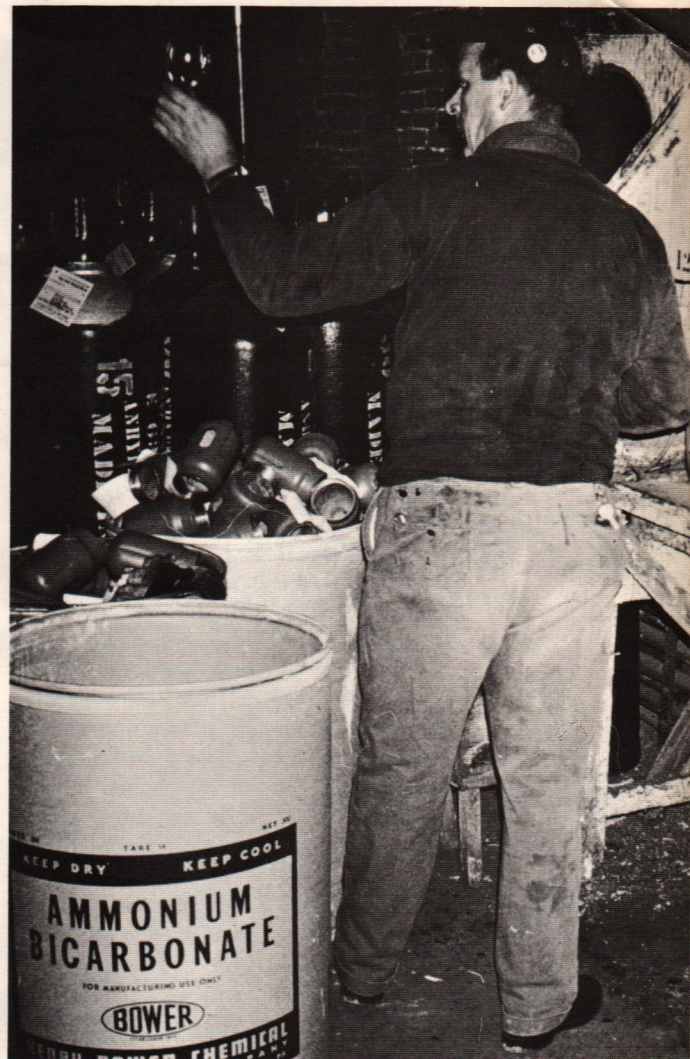
Throughout its history, Bower Chemical has constantly worked with customers to develop new applications for its products. A typical example is anhydrous ammonia, which was first distributed in 1903 and is still one of the company's important products. Today, its diversified uses include: bright annealing of stainless steel, copper and silver; nitriding steel and stainless steel; carbonitriding; commercial refrigeration; synthesis of resins; rubber manufacture; chemical synthesis; petroleum refining; water purification; and sewage treatment.

Other Bower products are supplied to virtually every major manufacturing industry for use in agricultural fertilizers, chemicals, foods, furniture, inks, leather, metals, paints, pharmaceuticals, plastics, and textiles.

With this issue, the *PM Producer* welcomes Bower Chemical's approximately 100 employees to its readership.



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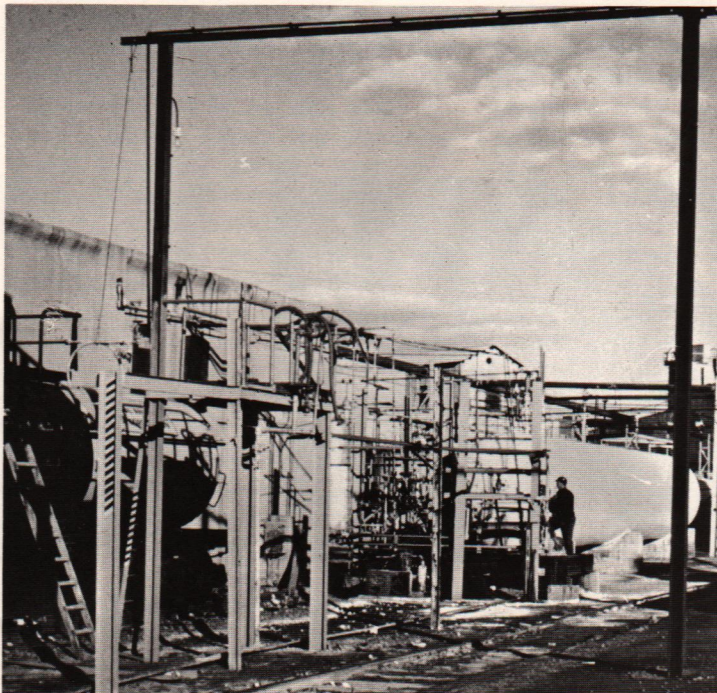
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1. Bower Chemical's smokestack, one of the tallest in the area, has been a Philadelphia landmark for years. The Bower plant is located on a very desirable industrial site on the Schuylkill River.

2. Chemicals know-how of Bower employees adds a whole line of new skills to the PM organization, together with some unfamiliar new product names.

3. While the Bower plant's equipment and processes bear at least a family resemblance to those at the Baltimore plant of PM's Manganese Chemicals Co. Division, they differ considerably from installations familiar to most employees of the PM organization.

4. Bower is one of the oldest and most important distributors of anhydrous ammonia. Employee checks seals of pressurized tanks of this product in shipping area.



3



4



KRIVOY ROG

Russia's "Mesabi Range"

Two PM employees had the rare opportunity to travel to Russia last summer and visit that country's Krivoy Rog iron mining complex, which can best be described as Russia's equivalent of the Mesabi Range in Minnesota.

Henry P. Whaley, general manager of Wabush Mines and Robert W. Bell, manager of new project appraisal in PM's Cleveland Office Planning Department, spent eight days in Russia on an exchange visit arrangement made in connection with a visit to Wabush Mines by Russian iron mining engineers.

While behind the Iron Curtain, Whaley and Bell visited three major areas of the 60-mile-long Krivoy Rog range, which is some 200 miles northeast of the iron ore shipping port of Odessa, on the Black Sea. The Krivoy Rog range contains five concentrating plants approximately the size of the PM-operated Erie Mining Company. The combined output of these plants is 40 million tons per year of concentrates averaging over 60% iron content. Pelletizing plants are now being built which will agglomerate some of these concentrates.

In addition, the Krivoy Rog has underground mines that ship another 40 million tons annually of direct-shipping ore averaging over 50% iron.

Whaley and Bell found the Krivoy Rog operations particularly interesting because of their general similarity to Erie Mining Company. (Whaley was assistant works manager at Erie for PM before taking charge of Wabush Mines.) The low grade ore being worked at Krivoy Rog is almost identical to Min-

nesota's taconite, and the Russian approach to processing is similar to our own. According to Bell, the Russians imposed almost no restrictions on their taking photographs, and the pictures they brought back point up these similarities.

The differences that seemed to them most striking apply to the employees at the mining operations. Bell reported that, while they found the mines to be well mechanized, in general more hand labor is employed in Russian industry than in the western hemisphere. One of the most difficult things to get used to in Russia is seeing women working right along with men on industrial jobs where they would not normally be employed in the free world. Although women do not work in the underground mines, the Russian taconite operations are no exception to this practice, and Bell told of seeing women working on track gangs and at other jobs on which you would normally not expect to find them. One crew relining the rotary kilns pictured here was composed of about 50% female laborers.

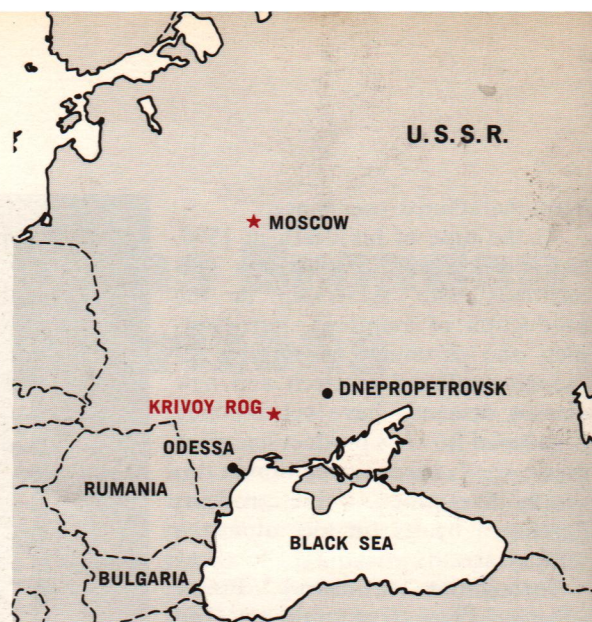
Another striking difference is in the housing provided for the workers at the Krivoy Rog. Bell explains that in Russia, except for agricultural areas, housing is primarily apartment buildings rather than individual dwellings. Thus, the Krivoy Rog has no equivalent to Erie's town of Hoyt Lakes. Instead there are numerous very large five-story apartment buildings. Few of these apartments rise higher than five stories because the Soviet building code requires elevators in apartments of greater height. The building code also requires a minimum of nine

square meters of floor space per occupant, which would give a young couple with no children a one-room apartment just slightly under 10x20 feet. However this provision of the code is largely unenforced, and families of three and four persons must often continue living in apartments of this size because of the impossibility of finding larger size accommodations.

Bell said he also felt it strange to see parking lots large enough to accommodate only ten or twelve cars behind apartments housing perhaps a thousand persons. Transportation in the U.S.S.R. is primarily by foot or electric trolley cars, rather than by automobile.

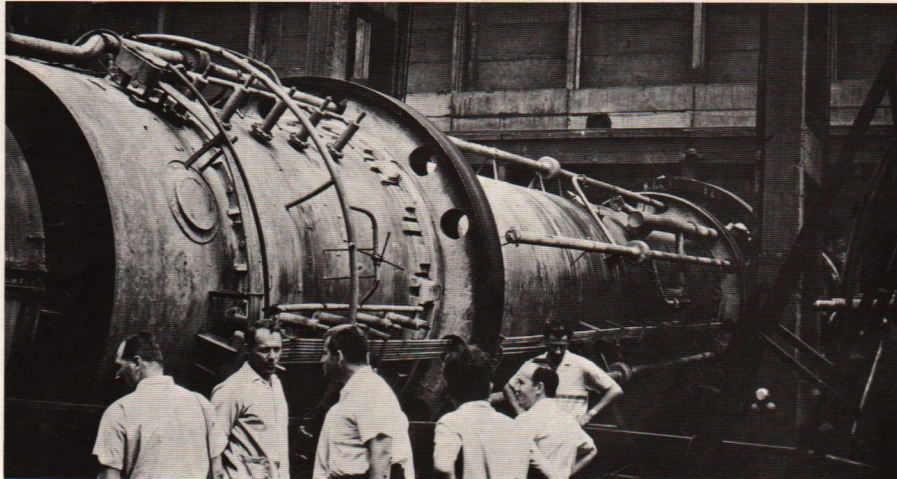
The Soviet iron miner works an eight-hour day, five days a week, and like our own mining operations their taconite operations run 'round the clock, twenty-four hours a day, 365 days a year. It is difficult to compare the Soviet wage scales to our own because of the wide variations in prices. The average wage at the Krivoy Rog seems to run about the equivalent of \$130 per month in American money. While a worker might pay very low rent compared to typical American housing costs, some items taken for granted on our side of the world are very expensive in Russia. A large-size chocolate bar, for example, of the size commonly available in the U.S. for 25¢, costs the Soviet worker over \$2.00!

Despite these differences, Whaley and Bell found the Russian people in general apparently well contented with their lot. And Bell reports that the Russians are friendly, open, and courteous to American visitors.





Whaley (left) and Bell pose in front of the Kremlin's main gate with their guide from Intourist, the Soviet agency for handling foreign visitors. Although visitors are no longer required to be accompanied by an official guide, language difficulties make such assistance a virtual necessity.



Whaley (center foreground of group), with Russian personnel, examines a rotary kiln used in reducing hematite, from oxidized portions of the Krivoy Rog taconite deposits, to magnetite that can be concentrated by magnetic separation. (We can't help pointing out that safety equipment such as hardhats and safety glasses, mandatory for all personnel and visitors at PM mining operations, is conspicuously absent in this and other photos of Russian operations.)



No, this picture was not taken at Erie Mining Company! PM's Bob Bell poses with a Russian jet piercing drill, used to bore blast holes in the Krivoy Rog taconite.



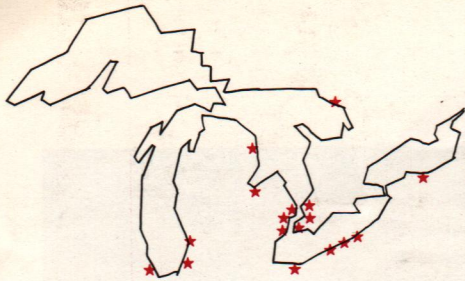
Open-pit taconite operations on the Krivoy Rog are similar to those on Minnesota's Mesabi Range. Note concentrating plant in the background in left photo. (Unfortunately, these color-slide snapshots lose considerable contrast when printed in black and white.)



Storage silos for raw crushed taconite at the Krivoy Rog South Combine's concentrating plant are also reminiscent of Erie Mining Company.



Taconite grinding mills inside the North Combine concentrating plant. Just as in our own installations, lighting is often a problem for photographers trying to show interiors of large bays. Soviet plants seem to be as well-lighted as our own, but varying light levels create exposure difficulties for the camera.



Interlake's First Self-Unloader

Steamer FRANK PURNELL

Opens New Ports For the Fleet

A new type of ship for the PM Interlake Steamship Co. Division's Great Lakes fleet, The Steamer *Frank Purnell* this month finished out its first full season of operation as a self-unloader under the PM house-flag.

A self-unloader is equipped with a boom and belt-conveyor system for off-loading its cargo.

The standard Great Lakes freighter is what steamship men call a "straight-decker." This term refers to the long stretch of deck, unbroken except for cargo hatch openings, between the ship's forward-end superstructure and the after-end house. The self-unloader's boom rides over this deck when the ship is navigating between ports, and the boom, with its supporting tower, gives the self-unloader a radically different silhouette.

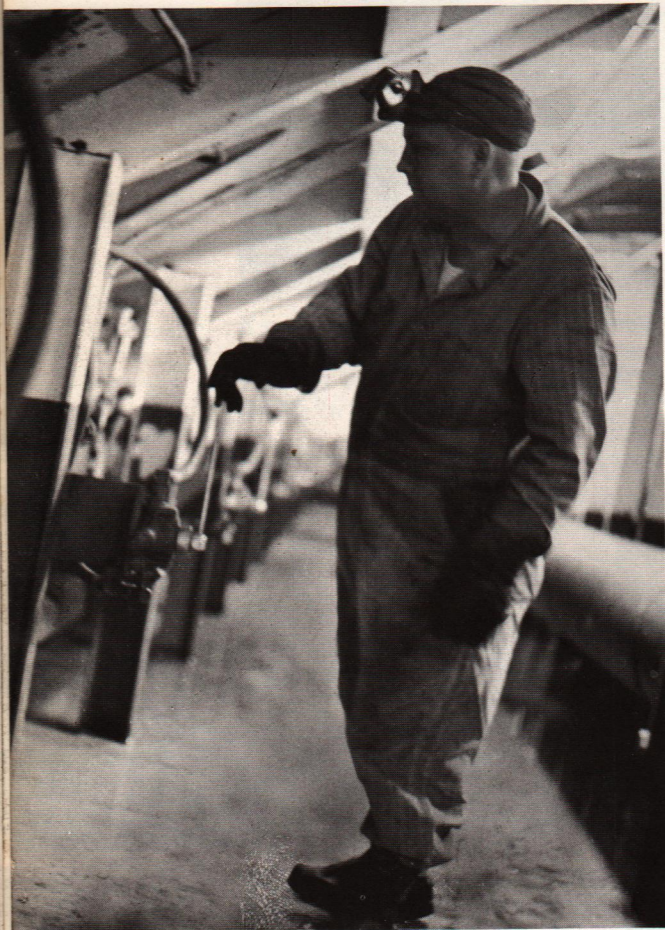
The pilot-house-forward configuration, incidentally, is a ship design that is unique to the Great Lakes fleets, and it may appear strange to some of our readers who are used to seeing the conventional outlines of ocean-going vessels. This arrangement is found on almost all cargo ships that operate regularly on the Lakes. It is preferred because it affords better visibility for maneuvering in close quarters and makes for

more efficient cargo handling when loading and unloading.

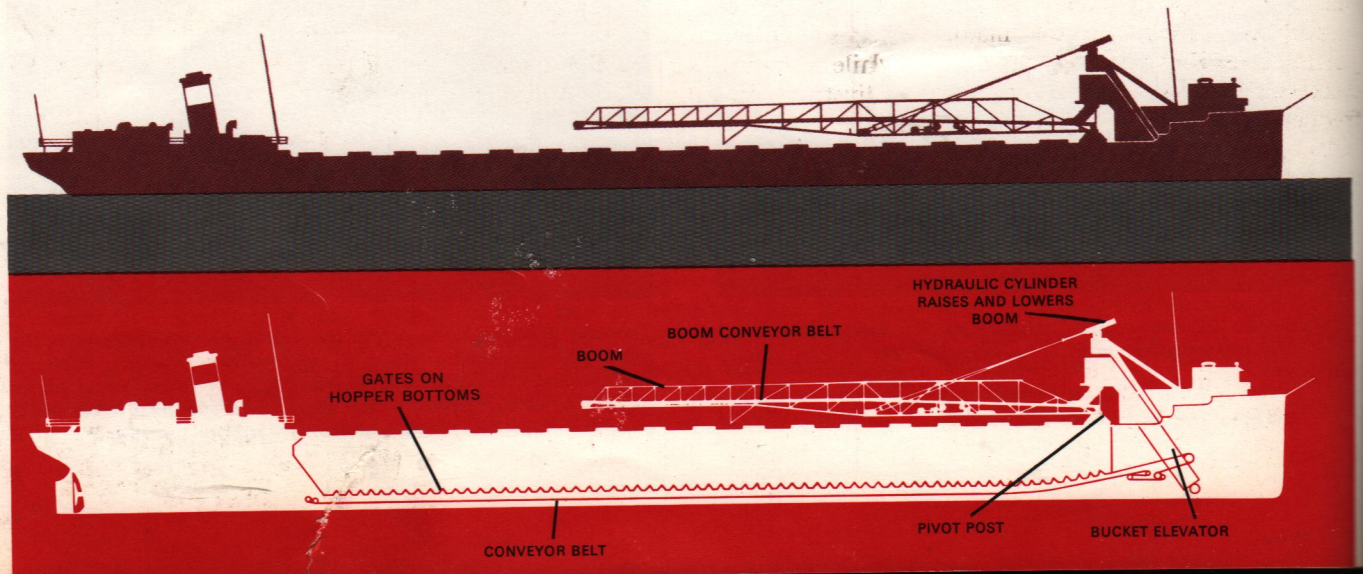
Straight-deckers, which until mid-summer of 1966 comprised all of the ships in the Interlake fleet, must be unloaded by special dockside machinery capable of reaching down into the holds, scooping up the cargo, and lifting it on to the dock, where it is either transferred to railroad cars or stockpiled until needed. By contrast, the self-unloader can place its cargo on shore anywhere its boom can reach.

The majority of Great Lakes bulk carrier cargoes are destined for ports equipped with unloading machinery. In recent years, however, high-volume freight-hauling competition from unit trains has become keen. This is especially true in the case of coal for power plant use. Therefore the many lower volume ports without unloading equipment have become an increasingly important market.

Because the *Purnell* carries cargoes of coal, limestone, and other commodities that were previously unavailable, the addition of this new capability has opened up many previously untapped sources of business for the company's fleet. Among the interesting "firsts" chalked up by the *Purnell* during the 1967 operating



Conveyormen in the tunnels below Purnell's cargo holds control flow of cargo from hopper gates to belt conveyors during unloading.



season are the following: Largest ship ever to go into the ports of Waukegan, Illinois and Alpena, Michigan. First ship in the company's history to carry a load of rock salt (from Fairport Harbor, Ohio, to Rochester, New York), and largest ship ever loaded at the Morton Salt Company Dock in Fairport Harbor.

A former straight-decker, the *Purnell* was converted to a self unloader in 1966, at a cost of approximately \$3 million. The change-over involved altering the flat bottoms of the ship's cargo holds to a free-running hopper configuration, and installation of two belt conveyors running the entire length of the cargo space beneath the holds. When the ship is unloading cargo, conveyor men open pneumatically-controlled gates in the hopper bottoms to permit the cargo to flow down onto the belts.

The belts carry the cargo forward to a bucket-elevator, similar to a moving staircase, in the ship's forward end, where it is lifted to the level of the boom and discharged onto the boom conveyor. The *Purnell's* boom, 250 feet in length, can be swung out on either side of the ship, almost at right angles if desired, so the cargo can be placed wherever wanted at dockside.

Although the *Purnell* carries three extra crewmen whose primary jobs are operating and maintaining its cargo-handling equipment, operating this type of ship is a demanding job requiring extra skill and judgement on the part of every member of its crew, from the Captain on down. Because the average cargoes of coal, limestone, or other commodities carried by self-unloaders usually travel shorter distances than the iron ore cargoes that make up the major portion of cargoes carried by straight-deckers, the self-unloaders dock more frequently, and they are therefore known as "busy ships." Since the greater side area of the boom and its supporting tower catch the wind like a sail, handling the ship requires special care and alertness on the part of its navigation officers and helmsmen.

Maintenance of the unloading machinery and its power supply is an important chore for the engineering



Passing the Interlake Steamer Samuel Mather in Chicago's Calumet Waterway, Purnell's crewmen swap news of fleet, tell of ship's latest accomplishments.

officers and engine room crewmen, in addition to their responsibilities concerning the ship's propulsion and steering equipment.

Wheelmen, whose normal responsibilities are steering the ship in response to orders from the captain or mate on watch, double as operators of the machinery that controls the placement of the boom when the ship is in port. Deckhands work longer hours taking lines ashore as the ship maneuvers in close quarters at the many docks.

The ship's cook and galley department, also, find mealtime schedules more apt to be disrupted by the more-frequent dockings.

But the most interesting job of all aboard the *Purnell* is the operation of the unloading machinery itself. When the boom is swung out at a dock, extra care has to be taken to ensure that the ship is properly ballasted to compensate for the off-center weight. During the unloading operation, the cargo must be stacked as desired by the receiving dock, and this usually calls for shifting the ship's position one or several times while unloading, as well as frequent adjustments in the angle and height of the boom.

Often the ship carries mixed types of the same cargo: for example,

Photo taken from catwalk halfway out to end of 250-foot boom. Hydraulic controls move boom so smoothly, PRODUCER photographer wasn't even aware boom was moving until scene in camera viewfinder shifted.



Boom can be placed very precisely, to unload cargo exactly where the customer wants it on his dock. Here, the Purnell unloads limestone at Chicago.



"Dock" at Muskegon, Michigan, consists of mooring spilings driven into water. Only a self-unloader can deliver bulk cargoes at this type of dock. Incoming cargo at Muskegon is primarily coal for utility plants.





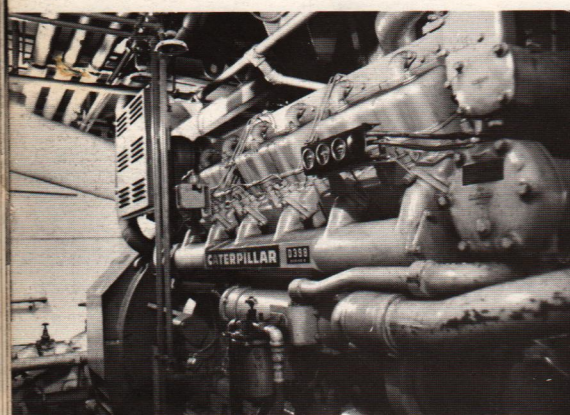
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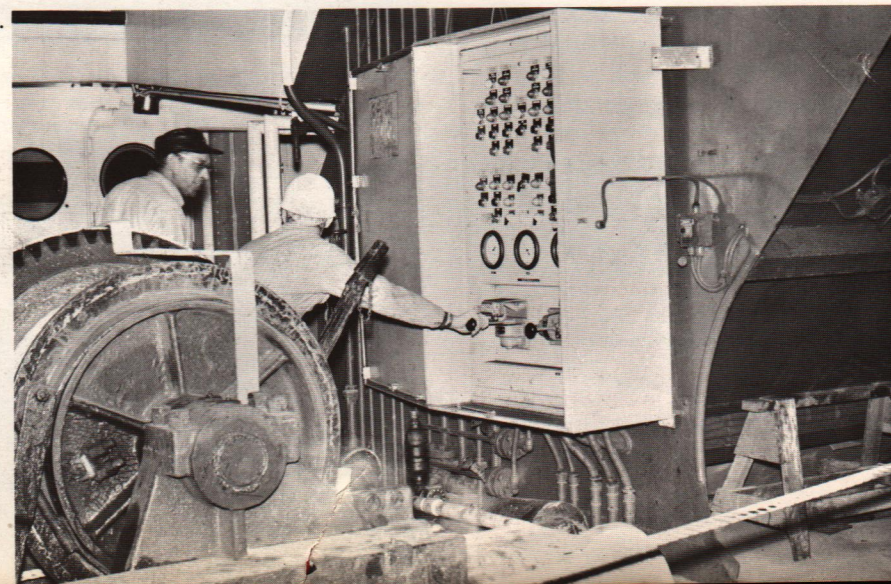
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limestone fines as well as larger size ranges; and when this is the case the different sizes have to be stacked in different locations on the dock.

When the hopper gates are opened to permit the cargoes to flow down onto the belt conveyors, the flow must be coordinated with the speed of the unloading machinery. Too slow a flow makes for longer unloading times, and too fast a flow could mean spillage from the belts or bucket elevators. In addition to all this, the holds must be emptied in careful sequence, to avoid straining the ship's hull by creating unbalanced stresses.

Despite these considerations the *Purnell's* crew has turned in some amazingly fast unloading times, one of the best being approximately 2½ hours to unload a 14,135-ton cargo of ore pellets at Detroit. Normal unloading time for a cargo of this size from a straight-decker would be at least 6 hours, using conventional dockside equipment.

Despite the all-out effort required of all hands (or maybe because of it), your PRODUCER reporter, on a recent trip aboard the *Purnell*, found morale among the crewmen to be very high, even for the Interlake fleet, which has a reputation for "happy" ships. One cannot help but feel the crew's pride in their ship, in what they can do with it, and in its good operating record for the season.

1. *Purnell's* skipper, James F. Gallagher, operates bowthruster control as wheelsman stands by helm for steering orders.

2. *Purnell* gets into some close quarters for a 605-foot ship rated at 14,200 gross tons cargo capacity (medium-size for most Lakers). Ship has a bow thruster, but tug assist was needed in Cleveland's Cuyahoga River due to strong wind.

3. Hopper bottoms of holds visible in this photo. Hoses must sometimes be used to assist flow of some fine-textured cargoes—limestone fines, in this case.

4. Diesel generating equipment totalling 1,200 KW generates power to operate unloading equipment, as well as ship's service requirements.

5. Lakes ships are famous for their high-quality meals. Second Cook George L. Burnett puts together a few pies for dinner. (He's not really shy, just tending to business!)

6. Boom is controlled from this station at the left of its supporting tower. Winch in foreground controls mooring cables.

Progress at Wabush Mines

Rounding Out Program

Early this year, two of the European steel company owners of Wabush Mines sold their interest in the project to the other Wabush owners, because of changes in their iron ore requirements. Since these two companies had been taking their share of the Wabush output in the form of concentrates, rather than pellets, it was decided at that time to round out the productive capacity of the pellet plant at Pointe Noire to handle the excess concentrates resulting from this change.

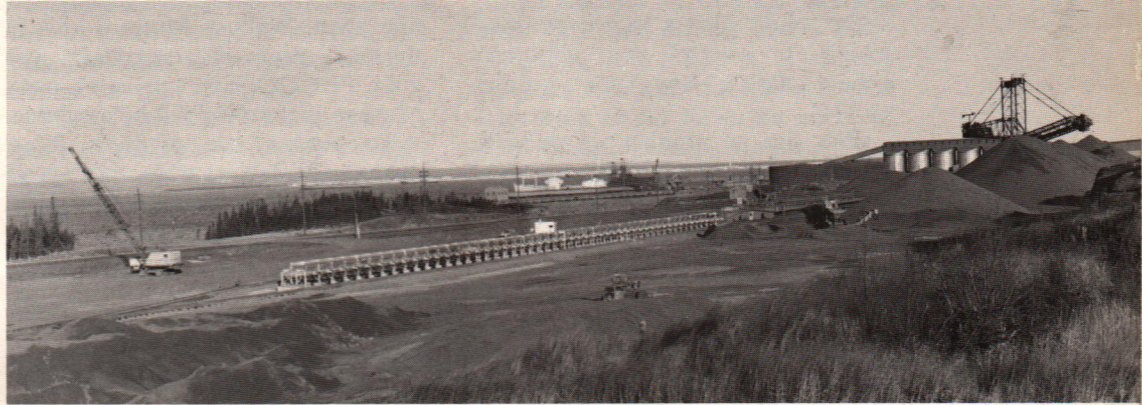
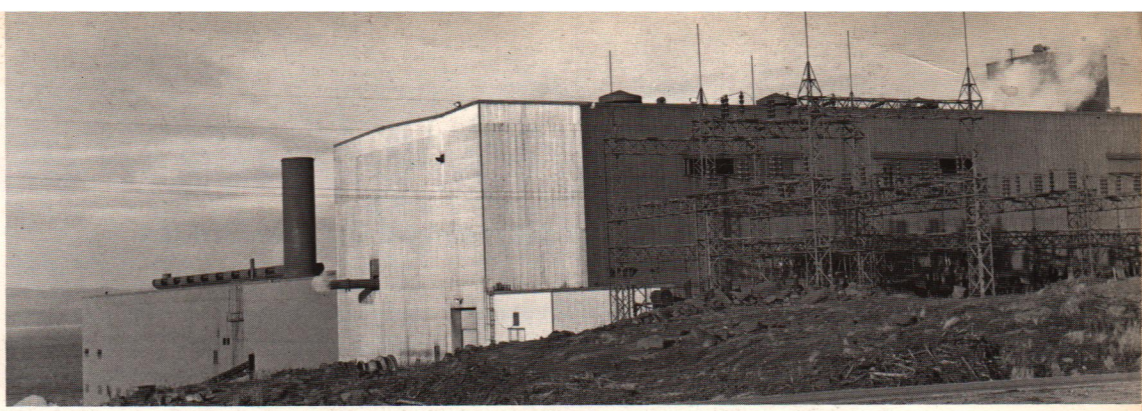
Originally designed to produce 4.9 million tons of pellets per year, the plant will be capable of producing 6 million tons when the changes are complete.

Modifications include the installation of an additional ball mill grinding line. The new ball mill will be larger than those of the existing seven lines—14 feet, six inches in diameter by 33 feet long, compared with 13½ feet in diameter and 28 feet in length. Driven by a 5,000 horsepower electric motor, its capacity will be greater than each of the existing mills.

Two dewatering filters will be added to handle the mill's output, along with three new balling drums, one for each of the plant's indurating lines. Changes are also being made to the indurating equipment to increase the air flow for the new production.

Pellet storage yard facilities are being increased by adding 500 feet to the storage yard conveyor and 550 feet to the stacker-reclaimer tracks.

As we went to press, approximately 40% of the program had been completed, and the new equipment is expected to be in full operation by mid-1968.



Building extension on the pellet plant at Pointe Noire (top) will house the additional ball mill. Additional space is also being added for new electrical equipment, and the concentrates storage bin is being enlarged. Extension of pellet storage yard (bottom) will increase its capacity by 450,000 tons.

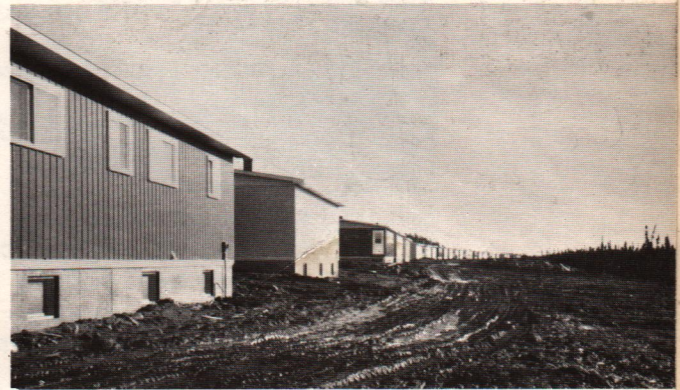
New Housing

A construction program to add 100 new houses to the town of Wabush, at The Scully Mine, in Labrador, is nearly complete, and the houses are ready for occupancy. Ground was broken for the new development in the spring of 1967.

Twenty-five of the housing units have four bedrooms, and the rest are three-bedroom homes. The houses will be sold to Wabush Mines employees only, on a 30-year financing plan. No down payment will be required, and the interest rate will be very low. Conditions of the sale will include a serviced lot at no charge.

Construction of the houses employed one of the very latest techniques in the industry. They are "built" at the factory, in two sections, completely equipped with electrical wiring, plumbing, heating conduits, kitchen cupboards, and bathroom fixtures. The sections are designed so they can be lifted by cranes, towed by trucks, and transported on railroad flat cars.

When they arrived at Wabush, the sections were assembled together on foundations prepared in advance, and the result could almost be called "instant" houses!



New houses at Wabush are pre-built in sections. Upper photo shows foundations ready for houses to be assembled on extension of Grenfell Drive. Lower photo shows finished houses in place on another part of the same street.

Let's Go to the Movies

Films Available for Employees and Outside Groups

Would you like to show your church group, social or service club, or other organization a movie about your company or the industry it serves?

Or would such a movie be interesting for one of your children's school classes, Boy Scout groups, etc.?

PM has a number of movies, about the operations it manages and the industries of which it is a part,

available for loan to employees and outside groups as well. All of these films can be shown with any 16 millimeter sound projector.

In addition to the list below, a new film about Wabush Mines is now in the final stages of preparation, and your PRODUCER will carry news of when this movie will be available.

To borrow one of these films, contact the nearest PM office where the film is listed as being available.

Or fill out the coupon below and mail it in to Cleveland. Since there is a continuing demand for most of these movies, please try to send in your request as far as possible in advance of the date you plan to use the film, and be sure to list an alternate date in the space provided on the coupon, as we cannot guarantee the films will be available on the date you select.

Steel Industry

STEEL AND AMERICA

Color/Sound/30 minutes.

Produced by Walt Disney for the American Iron and Steel Institute, this film presents an interesting and entertaining history of the steel-making process, and its important place in today's world. Disney's ubiquitous Donald Duck helps make the film interesting not only for adults, but for youngsters of all ages. Illustrates the varied uses of steel today, and the advancing technology of our modern steel industry. (Available with English soundtrack from Cleveland; Duluth; Erie Mining Company; Wabush Mines, Pointe Noire. Available with French sound-

track from Wabush Mines, Pointe Noire.)

Iron Mining

HORIZON NORTH

Color/Sound/30 minutes.

The dramatic story of Erie Mining Company, and the research and development work that made it possible. Describes the construction and operation of the Erie complex. (Available from Cleveland, Duluth, and Erie Mining Company.)

THE MINE IN THE VALLEY

Color/Sound/22 minutes.

Shows the construction and operation of the Hilton Mine in the Ottawa River Valley, where previously un-

usable low-grade iron ore is converted into high-grade pellets, in one of Canada's first pelletizing operations. (Available from Cleveland and Hilton Mines, Shawville, Quebec.)

Great Lakes Shipping

THE LONG SHIPS PASSING

Color/Sound/30 minutes

Produced under the sponsorship of the Lake Carriers Association, of which PM is a member. Tells the story of the Great Lakes bulk cargo fleet and the sailors who operate it. (Available from Cleveland.)

Coal

THE INVISIBLE POWER OF COAL

Color/Sound/20 minutes

A National Coal Association film about the nature and uses of this important mineral, its origin and areas of deposition, how it is mined, and how its energy is harnessed. (Available from Cleveland.)

Pig Iron

RICE BOWLS TO ROCKETS

Color/Sound/25 minutes

STRAIGHT LINE TO PRODUCTION

Color/Sound/29 minutes

CAST IRON — BIOGRAPHY OF A METAL

Color/Sound/18 minutes

Produced under sponsorship of the Gray Iron Founder's Society, Inc., these films have a technological slant that makes them of interest primarily to the foundry industry. (Available from Cleveland.)

Public Relations Department
Pickands Mather & Co.
2000 Union Commerce Building
Cleveland, Ohio 44115

I would like to borrow a print of the film checked below, for use on:

(date) _____ or (alternate date) _____

- STEEL AND AMERICA
- HORIZON NORTH
- MINE IN THE VALLEY
- THE INVISIBLE POWER OF COAL
- THE LONG SHIPS PASSING
- RICE BOWLS TO ROCKETS
- STRAIGHT LINE TO PRODUCTION
- CAST IRON—BIOGRAPHY OF A METAL

Name _____

Address _____

City _____ State _____

Zipcode _____

Beware of Death in 3D:



Cold weather and the holiday season increase the possibility that we will be tempted to put together a potentially fatal three-way combination: DRINKING/DRIVING/DRUGS.

The evidence mounts constantly. There is a new factor in the old equation of Drinking + Driving = Death. This factor is Drugs, and many times they have proven to be the cause of accidents. Often too, they could provide the explanation for what otherwise would be unexplainable driver behavior.

Actually there are three sides to the problem.

The first of these is drugs by themselves. According to the A.M.A. and the pharmaceutical journals, the commonly used drugs such as aspirin, anti-histamines, tranquilizers, antibiotics, sleeping pills and others often slow a driver's reactions to a

dangerous extent. And different people react in different ways to the same drugs. Side effects, which include dizziness, drowsiness, and loss of concentration, often last longer than the user suspects. For example, barbiturates can have hypnotic effects for up to 14 hours. A sleeping pill taken at night can impair a driver's ability the next morning.

The second side of the problem is mixing medications. Oddly enough, many people do not realize that drugs or medicines are actually chemicals that, combined with other chemicals, may form new materials that can intensify bodily reactions. The length of time a drug stays in the body can increase the possibility of a dangerous mixture. An anti-histamine in the morning, with cough syrup several times during the day, and just one small high-ball

in the evening, could be disastrous.

The third facet is alcohol and the effects of combining it with drugs. Alcohol in the most moderate amount often combines with a drug to create a devastating effect. Many people accused of drunken driving, after "just one drink," could easily be telling the truth. It is entirely possible that one tranquilizer, plus one drink could have the effect of four drinks. Perhaps forgotten was a drug taken earlier, which lingered longer than realized in the driver's system.

If you must drive after taking medication, check with your doctor about possible side effects . . . and do what he tells you. Don't try to be your own pharmacist, and don't try to mix drugs, with drinking or with driving.

Erie Safety Poster:

"STUDY THESE PHOTOS...THEY MAY SAVE YOUR LIFE"

A photographic safety poster developed recently by the Erie Mining Company safety department effectively demonstrates the need for extra care in the vicinity of large mine haulage trucks. The large trucks, designed only for off-the-highway operation, normally provide their drivers an excellent field of

view, with one important exception. From certain angles, it is difficult for them to see nearby objects, even those as large as a pick-up truck.

The Erie poster points out that the larger the truck, the shallower the driver's angle of vision for nearby objects, and it cautions drivers and pedestrians alike to be extra careful

around the big ones while on company premises.

PRODUCER readers should remember that drivers of large commercial tractor trailer rigs commonly encountered on the highways have a similar problem seeing nearby objects from certain angles.

THE DRIVER OF A 34-TON EUCLID CANNOT SEE YOU IF YOU ARE CLOSER THAN 10 FEET.



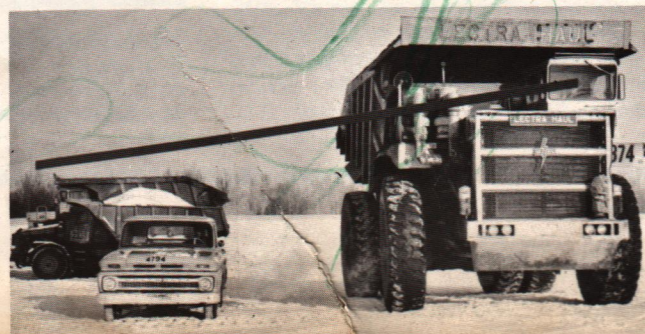
FOR A 65-TON DART, THE DANGER DISTANCE INCREASES TO 30 FEET.



STAY 50 FEET AWAY FROM THE 85-TON LECTRA HAUL.



IF YOU PARK LIKE THIS, OPERATOR CANNOT SEE EITHER YOU OR THE PICK-UP TRUCK.





Allen H. Ford

FORD NEW V.P.

In October the PM board of directors elected Allen H. Ford as Vice President—Finance. In his new position, the Treasury, Controller, and Tax Departments report to him.

A student at Phillip Exeter Academy and a graduate of Yale University, Ford joined PM in 1953, after serving as a sergeant in the U.S. Army during the Korean War. In 1960 he was named Assistant to the Treasurer of PM. He became Assistant Treasurer in 1963, and in 1964 he received his Master of Science degree from Case Institute of Technology, in Cleveland. In 1965 he completed Harvard University's Advanced Management Program, and in 1966 became Assistant to the Chairman of PM.

STEEL ON TV

PM's U.S. employees and their families are invited to enjoy "Great Explorations," featuring John Glenn, America's first 'round-the-world astronaut on the NBC-TV network, January 11, 1968, from 7:30 to 8:30 p.m., Eastern time. Sponsored by the American Iron and Steel Institute, of which PM is a member, the program will re-tell the classic story of Henry Stanley's search in Africa for the missing explorer, Dr. David Livingstone. Glenn and a motion picture crew re-traced Stanley's route last summer, to tell a fascinating story of the parallels and contrasts between what the early explorer faced and what one of the most modern explorers faced almost 100 years later.

Be sure you and your family see this fine hour of entertainment and education.

SAFETY AWARDS AT ERIE MINING COMPANY

More than 60 employees of the PM-managed Erie Mining Company received safety honors from the Joseph A. Holmes Safety Association in recent ceremonies at the Erie plant.

Sixty-two Erie employees received individual Joseph A. Holmes Safety Association Awards for records of 20, 30, and 40 years with the PM organization, through December, 1966, without a lost-time accident. This group represents a total of more than 1,300 years of service and over 2½ million manhours worked without a disabling injury.

Tops among the individual awards went to Joseph Mohar, of the Ore Dressing Department, an employee at PM operations for 40 years.

On the same occasion, the National Safety Council's highest citation, its Award of Honor, was presented to Erie Mining Company for having accumulated over 3 million safe manhours during the year ending in July, 1967. Erie works manager J. H. Healy accepted the award on behalf of the company.

Master of ceremonies for the affair was J. B. Bowen, Erie's safety supervisor. Principal speaker was Mr. Harry Shell, of the U.S. Bureau of Mines. Shell also presented Joseph A. Holmes awards to the company and to four of its depart-

ments, for manhours worked without a permanent disabling injury or fatality for various periods ending December 31, 1966, as follows:

Erie Mining Company (overall)—more than 22 million manhours in a six-year period.

Mining Department—more than 10 million manhours in a six-year period.

Maintenance Department—more than 8½ million manhours in a nine-year period.

Ore Dressing Department—more than 7½ million manhours in an eight-year period.

Agglomerating Department—more than 6 million manhours in an eight-year period.

Other special awards presented included the National Safety Council's Award of Honor, to the Ore Dressing Department, as first-place winner in recent surface mining competition. From November, 1963 to mid-Summer 1967, the department compiled a record of more than 3 million injury-free manhours. The Council's Award of Merit was presented to the Agglomerating Department for over 1½ million manhours without a disabling accident in the period from April, 1964 to June, 1967.



Erie employee Joseph Mohar (left), receives Joseph A. Holmes safety award from Ore Dressing superintendent R. J. Hull. Mohar has the longest service (40 years in the PM organization) of 62 Erie employees who recently received similar awards for accident-free long service. (See back cover for a complete list of all recipients.)

START-UP AT SAVAGE RIVER

Reports from Tasmania indicate that the start-up of the PM-managed Savage River Mines project is moving ahead. Loading faces are being developed in the pit and pit production operations are being conducted on a three-shift schedule. Late in October, crushing, grinding, and concentrating equipment was operated for the first time at the mine site plant, and the first concentrates were pumped through the project's unique 53-mile pipeline to the pelletizing plant at Port Latta. The pipeline and concentrates slurry pumping system has passed its scheduled start-up tests. Balling equipment is in operation at the pelletizing plant, and as we went to press, two of its five shaft furnaces had been brought up to temperature. Construction of off-shore shiploading facilities at Port Latta is proceeding satisfactorily, with completion anticipated in mid-January.

CHANGING YOUR ADDRESS?

With a circulation of slightly over 9,000 copies, almost all to employees and retirees, your PM PRODUCER really gets around.

The last time we counted, this magazine was being distributed to employees of about 26 locations in the U.S. (including PM's sales offices), a large fleet of Great Lakes vessels almost always on the move, four locations in Canada (including a French-language edition for one), and five overseas locations (including offices in Australia, Tokyo, and Paris).

We hope our readers can appreciate that distribution of each issue is a complicated process. While more than half our copies of each issue are mailed directly from Cleveland to our readers' homes, we have to ship quantities of the magazines in bulk to some locations for further distribution to the employees there—in some cases by mail, and in some by other means.

PM people seem to move around a lot. In fact, for just one section of our mailing list covering about 600 employees and retirees, we processed over 150 address changes during the past year!

People have asked us what to do to make sure they continue receiving their PRODUCER when they move. The answer may surprise you, for in most cases

THE Better Half

According to a well-known saying, "behind every good man is a good woman." Once in a while we're lucky enough to catch a glimpse of the good woman behind one of our good men in PM, and we think our readers might enjoy seeing them, too. To make this possible, we would appreciate hearing about any PM "better halves" (of either male or female employees) who have interesting hobbies, unusual occupations, special interests, news items about themselves, etc. Send along one or more snapshots (black and white preferred) and be sure to include your return address so that we can send the pictures back to you. If we receive enough "better half" contributions, we hope to make this a regular feature in the PRODUCER.

Mrs. Harry L. Brady, wife of Chief Engineer Harry Brady of the Interlake Steamer Robert Hobson, visits her husband aboard the ship. Mrs. Brady occasionally writes poetry, and her humorous commentary on "The Life of a Sailor's Wife" will probably strike a few responsive chords in other Interlake wives. From what Mrs. Brady tells us, publication of this item ought to surprise more than one member of the Brady family. Harry didn't know why the photo was being taken, and her son has promised he will read all of her poems just as soon as she gets one of them published. (Start reading, boy!)

The Life of a Sailor's Wife

*When your husband's a sailor and works on the lake
You both learn a lot about give and take.
He leaves you alone early each Spring
To raise the kids and do everything.
You learn to paint and mow the lawn,
Fix anything that breaks, from the car to the Jawn.*

*You listen to the kids squabble and fight,
And always tell your own they're in the right.
If they get into trouble its Mother's fault
For lack of something they weren't taught.
Daddy is away and gets no blame
Except that their name and his is the same.*

*Mama goes for a trip or two
Up the lake so still and blue.
All goes well unless it starts to roll;
Then she wishes she were back in their little hole
With all those little snotty-nosed kids,
Scrubbing the floors and garbage can lids.*

*Then things calm down and you cease to rock:
The next thing you know you're up to the dock.
You walk a mile to the nearest store,
And when you get there, you wonder "What for?"
You buy some candy, peanuts, and gum,
So you'll have something to do when things get glum.*

*"Both hands on the rail—Watch where you're walkin'—
Look out for that cable—" is Dad's constant caution.
You go back down the lake, you don't always know where,
But Daddy puts you off as soon as you're there.
He sends you back home—back to your duty:
You've had your vacation—Rootie Toot Tootie!*



you don't have to do anything at all!

Wherever possible, PM PRODUCER mailing addresses come directly from payroll and pension mailing lists. So if you move, if you notify the payroll office where you work, or the bank that sends you your pension check, the change should automatically be reflected in our PRODUCER mailing lists.

Sometimes, of course, it takes time for the notification to be processed, and

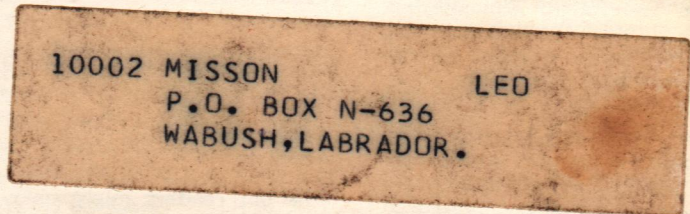
your copy gets mailed to your old address. And in any system, slip-ups are bound to occur. So if you feel it necessary to write us about your change of address, please include the label from one of your earlier copies of the magazine, so we can identify the list where the correction needs to be made. And even if you can't locate an old label, please include your address, city and U.S. Post Office Zipcode Number.



Producer

PICKANDS MATHER & CO.
2000 Union Commerce Building
Cleveland, Ohio 44115 U.S.A.

Return Requested



Safety Honor Roll

PM takes a very special pride in its long-time mining employees who have made safe working habits a way of life. The following Erie Mining Company employees recently received individual awards from The Joseph A. Holmes Safety Association for their long years of on-the-job safety. These men have worked a combined total of 1,350 years in the PM organization without a disabling or lost-time injury.

Forty Years

Joseph Mohar

Thirty Years

Fred Beton
Joseph Boben
Louis Falbo
Stephen Glatch
Eino Kajala
Frank Kosteliz
Arthur Mattson
Edward Miklausich
Frank Mohar
George Saari
Frank Setnicker
John Turk
John Sakovich

Twenty Years

Matt Anzelc
Elmer Beck
Anthony Berdice
Frank Berdice
Frank Beton
Thomas DeMario
Theodore Drazkowski
Donald Easter
Leo Flaschberger
Ignatz Fortuna
Felix Graykoski
Eino Harju
Harold Hawley
Eino Himango
Walter Jacobson
Albert Johnson

Tom C. Johnson
Jack Klobuchar
Frank Kmet
William Koivisto
Eugene Korpi
Toivo Lampe
Joseph Laurich
Arthur Longhini
John Mahovlich
Raymond Maki
Walter Maki
Victor Malenius
Joseph Marinsek
Thomas Murphy
John Noson
Wesley Ojala
Edward Pechar

Eino Pulkinen
John Putzel
Edward Rebrovich
John Rukavena
Frank Sherek
John Skalko
Leonard Sloma
Robert Stark
Joseph Stern
Eino Tomperi
John Trione
John Turk
Tony Udovich
Ven Vietanen
Wilho Wierimaa
Michael Zeliska



SERVICE AWARDS

Congratulations to the following employees who qualified for service awards representing 25 or more years of service with the PM organization, during the fourth quarter of 1967:

Cleveland

J. D. Reddy.....45 years

Danube Mine

L. Lavalier.....45 years
H. Burres.....25 years
D. Moors.....25 years
J. Plesha.....25 years
J. Unger.....25 years

Detour Dock

A. J. Lanieux.....25 years

Erie Mining Company

J. E. Phillipich.....45 years
J. L. Egger.....25 years
L. W. Rosga.....25 years

PM Research Lab

G. Pallanck.....25 years

Wabush Mines, Pte. Noire

R. T. Bell.....25 years



Producer

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