

NEWLY COMPLETED BEAVER PORTLAND CEMENT COMPANY AT GOLD HILL BEGINS OPERATION



MANUFACTURE OF CEMENT BEGUN AT MODERN \$700,000 PLANT WITH 1000 BARRELS A DAY CAPACITY

Latest and Most Improved Machinery Installed With Latest Methods of Manufacture—Utilizing Vast Deposits of Lime and Shale—Gravity Used in Transportation and Electric Power in Operation—"Wet" Process Used—Raw Material Sufficient to Run Plant at Full Capacity for a Hundred Years—Lime Is From Two Quarries.

After three years spent in construction work, entailing an outlay of \$700,000 for material and machinery, \$75,000 for freight alone and \$100,000 in payroll before a wheel was turned, the plant of the Beaver Portland Cement Co., at Gold Hill was put in operation Monday when the first loads of limestone were hauled from their quarries two miles west of the plant, transported by a long incline by means of a balance tram, passed through a crusher and dumped into huge storage bins preparatory to the active making of this stone into cement.

The plant, which is situated about half a mile north of Gold Hill, was started in 1913. Operations were discontinued during 1914, due to the impossibility of obtaining shipments of machinery. Last year work was continued and now the plant stands ready for its work, complete in every detail. The building operations were carried out by the Hunt Engineering company of Kansas City.

J. S. Burch of Portland is vice-president of the company. William Schrupp vice-president, R. P. Tucker superintendent and chief chemist, G. D. Cronmiller electrical engineer and William Steggs is in charge of the quarries.

Built for Permanence.
For more than a year now Mr. Tucker, the chief chemist, has been engaged in testing samples of shale and limestone from the surrounding hills, has found the exact proportions of each necessary for the production of the best cement and has actually made in the laboratory samples from the rock in the company's quarries. In the quarries held by the company is enough material to run the plant continuously for a hundred years or more. The limestone quarries are on a hill two miles west of the plant, and on the hillside directly behind the plant. Here also are the beds of shale rock which is used. The plant was built for permanence and for the adequate working of the enormous supplies of raw materials at hand.

Latest Methods Used.
Throughout the plant the latest and most approved methods of manufacture are used. For the transporting of material the gravity system is used, very little power being necessary for the movement of the product from the time it enters the hoppers on the hillside. In grinding, the latest and most economical types of machines are used. In making the cement the materials are put through what is known as the "wet process," which is claimed to produce the most

uniform cement, due to the greater admixture of ingredients while in a state resembling a thick mud. The capacity of the plant is 1000 barrels, or 4000 sacks, of cement a day. The materials used are 250 tons of limestone, 100 tons of shale, 30 tons of gypsum and 10,000 gallons of crude oil, which is used for fuel in the burning of the crushed stone. Half of the limestone now being used comes from the quarries lying two miles to the west of the plant, and known as the Incline quarries, and half from the quarries at the plant.

The shale also comes from the plant. The gypsum and oil are, of course, shipped in. Storage is provided for 150,000 gallons of oil. The rock from the Incline quarries is carried down a gravity tram 2500 feet long, crushed in a No. 8 rotary crusher and elevated into a storage bin of 1000 ton capacity. Hopper-bottom cars are filled from this bin by gravity and transported over the S. P. to the plant.

Making of Cement.
At the plant the cars are run on an incline hooper, from whence it is carried up the side hill to the back of the plant in three-ton ore cars, dumped into another huge crusher, where it is broken in pieces one inch in diameter and smaller. The rock is brought from the quarries in pieces about the size of a man's two shodded feet. It is cut free from inclining platforms up the side hill to the back of the plant in small ore cars and dumped into bins. From the bins it is carried to a huge rotary crusher, where it is broken in pieces one inch in diameter and smaller, dropping from the crusher into bins, from which it is transported into the wet grinding mill, where it is ground. In this building it is

separated, that which passes the screen going to the final grinding mill and the remainder going back to the Shurtzoff mill. From the Shurtzoff mill, all elevators and conveyors are included for the protection of men and machines from dust. From the screens the cement passes to the tube mills, where it is ground fine enough to allow 95 per cent to pass a screen of 100 mesh, to the square inch. The making of the cement is now completed and the finished product is conveyed by means of elevators and screw conveyors to the warehouse, where it is specked ready for shipment. The warehouse has a storage capacity of 50,000 barrels.

Electric power is used throughout the plant, 1200 horsepower being used at the plant and 200 horsepower at the quarries. Eighty-five men are employed at the plant, it being the plan to run twenty-four hours a day. The payroll will amount to \$250 per day. It is expected that the actual making of cement will begin the first of next week, when the rock storage tanks will be filled.

Huge Kilo Used.
The slurry is fed automatically into the revolving kiln, through which it takes three hours to pass. The kiln is 200 feet in length and 10 feet in diameter. It is lined with fire brick nine inches thick. The kiln tube alone weighs 200 tons, and with its fire brick and load of material 500 tons. In this kiln, under the intense heat of burning oil which is fed into the kiln at 80 pounds pressure and 200 degrees Fahrenheit, the chemical change takes place which turns the ground rock into cement. The slurry slowly works down the revolving kiln, drying out as it goes, until when it reaches the end it just begins to fuse at a temperature of 2800 degrees, and forms into what looks like small black pebbles, which are called clinkers.

The clinker, which emerges from the kiln white hot, is fed into a receiving cooler through which it takes twenty minutes to pass. From the cooler the clinker is fed into two 30-ton hoppers. At the foot of each of these hoppers is a small hopper, which gives the clinker the correct setting time. The pure cement would set almost instantly.

Finishing Process.
The clinker is carried by automatic elevators from the hoppers to a Shurtzoff preliminary mill, where it is ground. From the Shurtzoff mill it is carried to a large screen, where it is

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ACADEMY PLANS FAIR AID BAZAAR FOR NOVEMBER 13

If co-operation and the generous activity of many interested friends count at all for success, the Parent-Teacher and General Bazaar of St. Mary's academy, November 13 to 15, will be one of the most successful fairs ever held in Medford. Friends of the academy from near and far are rallying to her call and are devoting time and talent to leave nothing undone that can in any way add to the success and pleasure of the week. The Culbert building has been secured and it will be filled from first floor to third with attractions for all. There will be charming dolls to delight the little ones, pretty things for Christmas gifts, useful articles to supply every need. Lunch and dinner

will be served every day and each evening has its own attractions. The musical program will be announced later. The fair is under the able management of Miss Alice Hazley and Mrs. O. J. Patton, supported by the following committees of able and willing workers: Baby and doll booth—Miss June Karhart, chairman; Mrs. O. E. Osborne, Mrs. H. W. Paddock. Fancy work—Mrs. Ernest McKee, chairman; Mrs. Charles Dolin, Mrs. A. Huff, Miss Reilly. China—Colonel club, Mrs. W. B. Taylor, chairman; Mrs. F. W. Hamill, Mrs. J. V. Beckwith, Mrs. A. B. Souder, Mrs. J. Sany-Smith. Apron booth—Miss Anna Kelleher, chairman; Mrs. John Whitson, Mrs. Gladys Peart, Miss Helen Dahl, Mrs. A. L. Douglas, Mrs. James Cronmiller. Fancy aprons—Mrs. Glidden, chairman; Mrs. R. Miller, Miss Anna Ulrich, Miss Catherine Beck. Ice cream and cake—Mrs. James Peaton, chairman; Mrs. J. Murphy, Mrs. John Orth, Mrs. Kelly. Fish pond—Mrs. H. Nordman,

chairman; Mrs. R. Jackson, Miss Elizabeth and Rose Meyer. Parcel post—Mrs. O. J. Patton, Mrs. E. B. Hauley. Nigger babies—Mrs. Willard Campbell. Lunch room—Miss Catherine McAndrews, chairman; Mrs. Miles Central, Mrs. W. C. Debbler, Mrs. G. C. Garrett, Mrs. A. M. Howells, Mrs. Grant Burroughs, Miss Rose Buckley, Mrs. Mollie Ray, Mrs. E. E. Williams, Mrs. Postwick. Useful articles—Mrs. William G. Steel, chairman; Mrs. W. Herbert, Mrs. A. C. White, Mrs. J. Turner. Country store—Mr. and Mrs. Henry Callaghan.

WILLIAM ROCKEFELLER SUED FOR \$165,000.000
NEW YORK, Nov. 2.—In an answer filed today in federal district court to the suit of Edward Adams and other stockholders to recover \$165,000,000 from William Rockefeller and associate directors of the New York, New Haven and Hartford railroad company, denial was made that the company had conducted a monopoly in restraint of trade.

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50-inch Cord Gaberdine	\$1.85	Stamped Towels	50c	1 lot special	\$4.50
54-inch French Serges	\$1.85	Stamped Towels	75c	1 lot special	\$5.50
44-inch Storm Serges	\$1.50	Fudge Aprons	35c	1 lot special	\$6.50
36-inch Storm Serges	75c	Laundry Bags	\$1.25	Some have Two Pairs Pants.	
Can supply you with nearly all colors.		Bayou Scarfs	35c	BOYS' BLOUSES	
FALL SILKS		Big assortment of all lines of Stamped Goods—see our windows.			
36-inch Plaids	\$1.75	HIGH SCHOOL CAPS			
36-inch Plaids	\$1.98	Express shipment Black and Gold High School Caps.....40c			
36-inch Taffetas	\$1.50	Suits			
36-inch Taffetas	\$1.75	Everything new in Suits, many are fur trimmed and have the new cape collars and new full skirts. Smart Russian model with double belt at waist line; black velvet collar trimmed with skunk fur worn high or low; full flare skirt with back belt at waist line; developed in excellent quality wool gaberdine serges in black, green and brown; also other materials and styles; all sizes; priced at.....\$18.50 to \$25			
36-inch Taffetas	\$2.00	Handsome New Suit of gaberdine, in fashionable straight-line model with box plaits on coat, front and back; military collar of velvet, novelty cuffs; skirt in yoke effect with pockets; coat trimmed with bone buttons; many other styles are shown at.....\$45.00			
40-inch Crepe de Chine	\$1.75	Skirts			
40-inch French Crepe	\$2.00	Matsen Dress Skirts, latest styles and fabrics, new this week. Be sure to see them. Priced \$5.50 to \$15			
Big stock of Black Silks in all widths and qualities.		Coats			
		NOVELTY COATS			
		Hardly two alike. Coats for motoring, for street—dressy coats, velvets, velour broadcloths, kitten's ear cloth, plushes, mixtures, plaids. Rich trimmings of Hudson seal, natural racoon, possum, mouton, etc., beautiful exclusive Novelty Coats—\$27.50 to \$40 upwards.			
		POPULAR PHICED COATS			
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		Dozens of handsome Coats, rich, beautiful browns, new greens, Burgundy, as well as navy and black. If you are interested in a coat,			

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