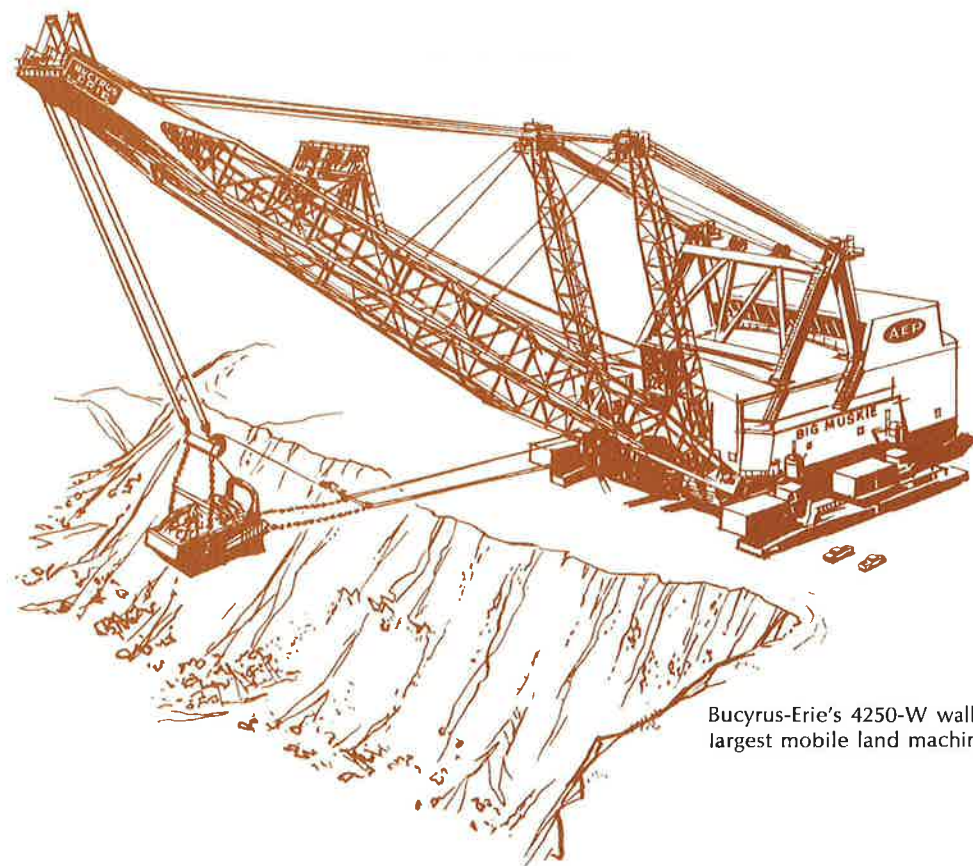
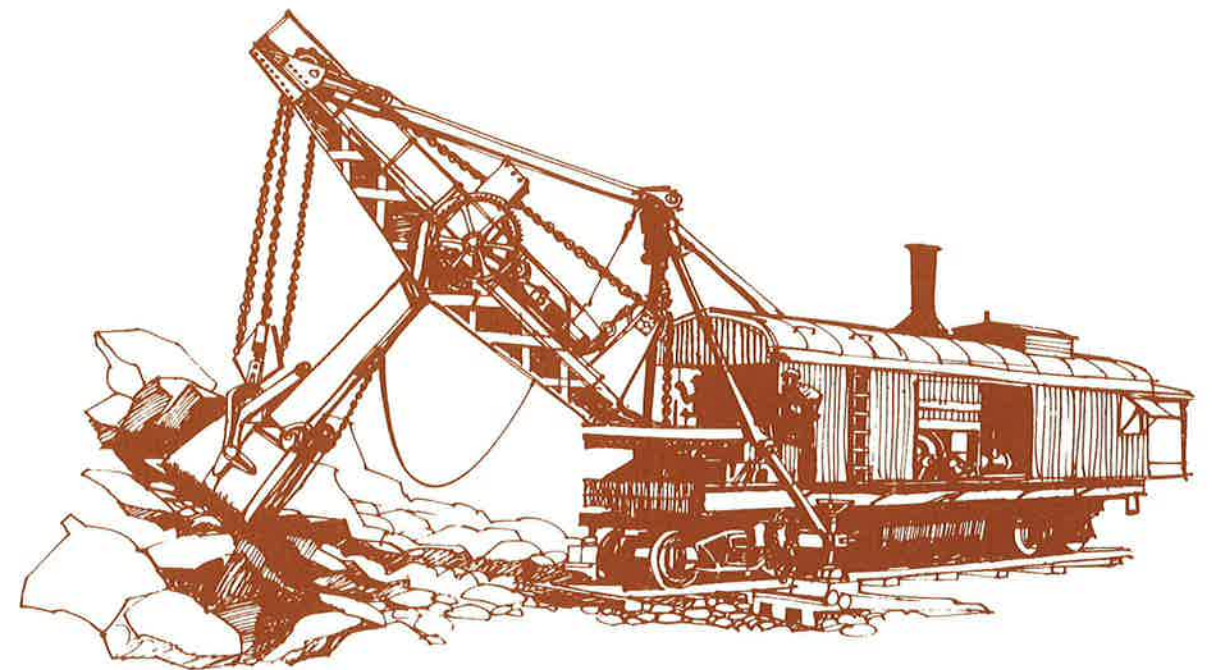


# A brief history of BUCYRUS-ERIE COMPANY



Bucyrus-Erie's 4250-W walking dragline,  
largest mobile land machine in the world.



BUCYRUS-ERIE COMPANY • SOUTH MILWAUKEE, WISCONSIN 53172



®  
An Industry Leader Since 1880

## EARLY YEARS

Daniel P. Eells was a typical representative of the group of energetic businessmen and *entrepreneurs* who were operating in the upper Middle West during the last half of the nineteenth century. He and a small group of relatives and business associates gathered in his Cleveland office on December 18, 1880 for the purpose of organizing a manufacturing company. The corporation they founded, under the name of Bucyrus Foundry and Manufacturing Company, was formed at Bucyrus, Ohio "to carry on the business of a foundry and of manufacturing machinery and railroad cars, etc." That company, established 90 years ago, is the ancestor of the present Bucyrus-Erie Company, one of the world's leading manufacturers of cranes, excavators and drills.

By 1889, Bucyrus was largely committed to the manufacture of excavators, and was able to boast in a company catalog, "We have by far the largest and best equipped shops in the country for the manufacture of steam shovels and dredges."

Between 1889 and 1894 the Company's geographic distribution was broadened by the addition of sales representatives and branch offices. By the end of the period, Bucyrus had branch offices in New York and Chicago and distributors in Denver, San Francisco, Houston and Boston.

As in earlier years, the bulk of Bucyrus' standard equipment was sold by the Company's part-time traveling representatives, among whom E. H. Hipple was outstanding. In many years Hipple made one-third to one-half of the Company's sales, and he was the recipient of the Company's first combination salary and commission plan.

As a result of heavy demands on the plant at Bucyrus, manufacturing operations were moved in 1893 to greatly improved production facilities in South Milwaukee, Wis. The Bucyrus, Ohio phase of the Company's history was closed when it was officially incorporated in Wisconsin on August 16 of that year, under the name of Bucyrus Steam Shovel and Dredge Company of Wisconsin.



An early photo of the South Milwaukee plant, taken in 1893 following the Company's move from Bucyrus, Ohio.

In the latter part of 1893 the nation experienced an economic collapse, the Company's business suffered — especially from a shortage of capital — and by 1895 it was in receivership. Out of reorganization efforts came The Bucyrus Company, formed in 1896. Over 90 per cent of sales during the receivership period were derived from items that had been developed between 1889 and 1895; namely dredges, 40-ton and 50-ton shovels, and repair parts for these items. It was in the large, special-purpose excavating machines that Bucyrus management had made notable progress. This was the type of equipment that best suited the Bucyrus manufacturing, engineering, financial and management resources.

During the years 1902-1911, management of the new Company again achieved impressive operating and profit results, through an excellent reputation for performance, new manufacturing facilities and techniques, and improved marketing methods. Much of the spadework for Bucyrus-Erie's present position as an industry leader was laid during this first decade of the twentieth century, when Bucyrus was a principal participant in major excavating projects of the period. During that time, the Company built placer dredges for the California gold fields; shovels for the vast Mesabi Iron Ranges; dredges for enlargement of the New York State Barge Canal — the largest earth-moving project in the U.S. between 1902-1912 — and machines in large numbers for one of the most exciting construction projects in the history of man — the digging of the Panama Canal.

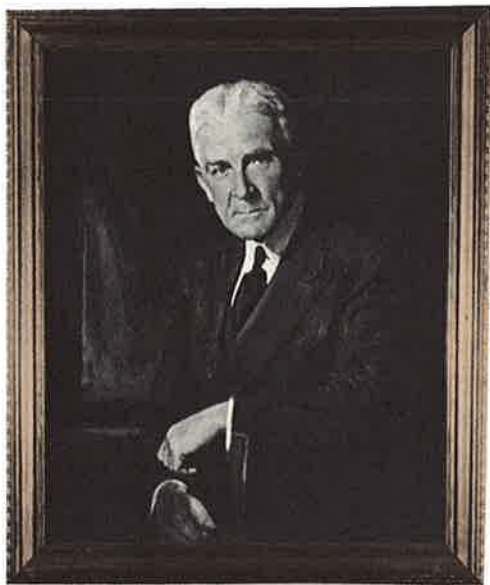
## B-E SHOVELS ON THE PANAMA CANAL

The 77 shovels delivered by Bucyrus to the Isthmian Canal Commission represented the lion's share of shovels used for the Panama Canal's construction. They also constituted about one-third of the total number of large shovels sold by the Company between 1904-1907. The significance of such sales was of great importance to Bucyrus. The size and certainty of the orders stimulated plant expansion, and enabled management to familiarize itself with the economics of production in relatively large machine lots.

Bucyrus became a publicly-owned company in 1911, with the formation of Bucyrus Company. This new Wisconsin corporation acquired the property, assets and business, and "good will" of three companies: The Bucyrus Company, Bucyrus-Vulcan Company, and the Vulcan Steam Shovel Company. Among the assets acquired was the yet-to-be constructed Evansville, Ind. plant of the Bucyrus-Vulcan Company. This plant, which today totals 516,000 square feet, now manufactures Bucyrus-Erie construction machinery including hydraulic cranes, oil and water-well drills, and crawler-mounted shovels.

By 1925 Bucyrus had been guided into first place in the industry. Its growth appeared to have a firm base in





William Wheeler Coleman . . . painted in 1936 on the occasion of his 25th anniversary as president of the Company.

customer preference for Bucyrus products. The members of the management team, especially William W. Coleman, a skillful, exacting and highly competent chief executive, were in firm control of the corporation's policies. As officers and directors of an operationally successful firm, the oldest and largest of its kind in the United States, if not in the world, their income, prestige, and economic power had been considerably enhanced. In summation, Bucyrus Company was well-established in its field, was adequately financed, and was guided by a management of proven capability.



Theodore Roosevelt climbed aboard a Bucyrus 95-ton shovel on a 1908 inspection trip of the Panama Canal. This has become one of the Company's most widely published pictures.

## BUCYRUS MERGES WITH ERIE STEAM SHOVEL

Bucyrus Company merged with the country's foremost manufacturer of small excavators, the Erie Steam Shovel Company, in 1927. This company could trace its corporate ancestry back to 1883, almost as far as the Bucyrus organization. It was founded in March of that year when F. H. Ball and W. H. Nicholson formed the Ball Engine Company for the purpose of manufacturing steam engines at Erie, Pa.

For more than a decade prior to the merger of the two companies, it had been the Erie Steam Shovel Company's boast that "...no single shovel is ever built in our plant. ERIES are put through the factory in lots, with all parts made to jigs and templates, and parts are absolutely interchangeable. This not only insures better workmanship, but cuts the labor cost so that we are enabled to put several hundred dollars more of the raw materials into the ERIE shovel and still keep down the price."



Aerial view of the Erie, Pa. plant, which manufactures Bucyrus-Erie construction machinery products.

The best general description given of the advantages expected from the consolidation of Bucyrus and Erie was given in the application for listing of the stock of the new company on the New York Exchange, which stated: "The purpose of Plan is to bring together under one management manufacturing plants, the products of which naturally supplement one another in the field of excavating machinery, by establishing a company handling power shovels, and other machinery for excavating and handling materials, of a number of sizes with the ability to sell these products with increased economy and efficiency, especially in foreign markets."

The resulting corporation, Bucyrus-Erie Company, provided for the interchange of engineering information, the mutual use of valuable patents, and an effecting of econ-



omies in operation. In addition, the new Company was able to offer to the trade a complete line of small and large shovels and two well-organized sales departments.

The organizational structure of the new Company was developed along the Bucyrus pattern rather than the informal Erie model. Within a year the heads of all departments were located at South Milwaukee, as were all administrative personnel except the Evansville and Erie plant managers and their rather limited staffs. Manufacturing was clearly divided along the foregoing lines, which have persisted nearly unchanged to the present day. Erie and Evansville produced the small equipment and South Milwaukee the large machines.

## RUSTON-BUCYRUS, LIMITED FORMED

Bucyrus-Erie joined with Ruston & Hornsby, Ltd., the oldest company and the best-known name in the British excavating-machinery industry, to organize Ruston-Bucyrus, Limited in 1930. The new company was formed in England for the purpose of specializing in the manufacture and sale of excavating machinery. It was to take over the entire excavator business of Ruston & Hornsby, Ltd., and all the business carried on by Bucyrus-Erie Company in certain parts of the world. Each parent company named four directors to Ruston-Bucyrus Limited, and William W. Coleman became chairman of the board. R-B is now Bucyrus-Erie's largest subsidiary, and ranks as one of the largest manufacturers of excavators and cranes in Europe.



The Ruston-Bucyrus plant, totaling more than 2,780,000 square feet, is located in Lincoln, England. It manufactures nearly the entire line of B-E designed construction equipment, and mining equipment up to 12 cubic yard capacity.

Bucyrus-Erie acquired controlling interest in Monighan Manufacturing Company, well-known for its unique product, the walking dragline, in 1931. The following year B-E acquired exclusive manufacturing rights to Armstrong churn-type drills to become a leader in water-well and blast-hole drill markets.

It is interesting to note that Bucyrus-Erie's long-standing policy of diversifying its excavator products was greatly accelerated in the midst of the Great Depression. Most important of the items added between 1931 and 1939 were walking draglines, drills, and tractor equipment. By 1939, total annual shipments of these machines had risen to approximately 50 per cent of the Company's older lines, and each had made a positive contribution to earnings in every year since its inception. Moreover, sales of all three had exhibited a promising growth, and future prospects for each were bright indeed. There is little doubt that the decisions leading to adding these products were among the most significant of the Company's entire history.



Bucyrus-Erie developed the 240 mm. howitzer, which contributed greatly to a number of European campaigns, during World War II. These two guns had just fired their last rounds to celebrate the cease fire of May 8, 1945.

## WORLD WAR II

A greatly expanded demand for excavators that began with the outbreak of World War II in Europe dominated the history of Bucyrus-Erie from 1940 through 1945. Virtually the entire output of the Company from 1942 to

1945 was devoted to the war. Taken as a whole, the Bucyrus-Erie war effort had these components: expansion of its regular line for civilian purchases; production of its regular lines for the Government; and the design and production of special ordnance equipment — chiefly gun carriages.

Following the war, the Company initiated a \$2 million expansion program which increased plant capacity approximately 20 per cent between 1948 and 1951. Bucyrus-Erie augmented its capacity for producing contractor-size cranes and excavators in 1951 by purchasing 97.6 per cent



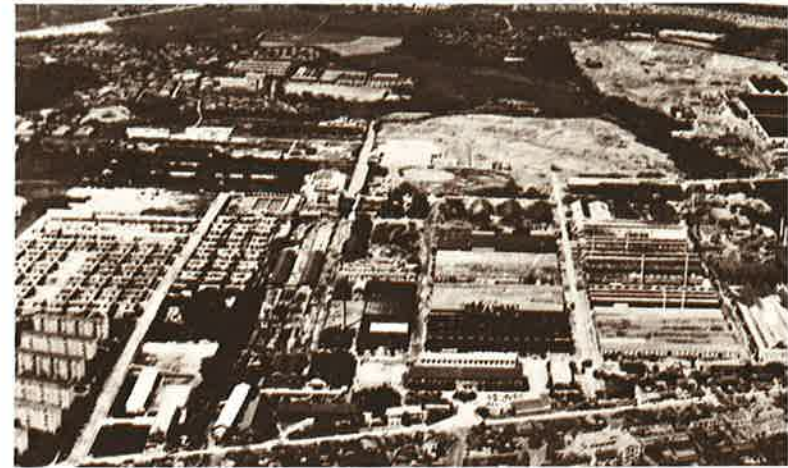
An industry-preferred DYNABOIL® at work.

of National Erie Corp., a large steel foundry employing about 450 men. Three years earlier, the patents and assets of Milwaukee Hydraulics Corp., a leading producer of all-hydraulic truck cranes, had been purchased. This added the highly successful Hydrocrane, "an amazingly simple, useful and well-liked piece of equipment" to the Bucyrus-Erie product line.

In order to benefit from the growing overseas market potentials for Bucyrus-Erie machinery, steps were taken in 1963 to establish manufacturing joint-ventures in Japan, Brazil and Mexico in conjunction with local partners. Licensing arrangements have also been made in Australia, South Africa and several other countries for production of certain types of machinery.

Bucyrus-Erie entered into the power transmission field through the acquisition of Atlas Chain and Precision Products Co., Inc. in January, 1968. Atlas, manufacturing an established line of roller and conveyor chain products used extensively in farm equipment, construction machinery and power transmission, is located in West Pittston, Pa.

Brad Foote Gear Works, Inc., located in Cicero, Ill., and its subsidiary, Pittsburgh Gear Company, Pittsburgh, Pa., were acquired by the Bucyrus-Erie Company in May, 1969. Brad Foote is one of the country's leading manufacturers of gears and precision engineered gear drives. The plants, occupying 153,000-square-feet, serve leading corporations in the automotive, aviation, machine tool, mining and steel industries.



Aerial view of Komatsu Manufacturing Company plant near Osaka, Japan, where Komatsu-Bucyrus construction machines are manufactured.

The Hy-Dynamic Co., manufacturers of hydraulic rough terrain cranes and backhoe/loaders, was acquired by Bucyrus-Erie Company in August, 1971. The Hy-Dynamic Co. originated the DYNABOIL, an integral frame backhoe/loader now made in five models. DYNABOIL machines are the number one preference in America over all similar competitive machines, according to an independent survey of construction equipment purchasers/owners in 1972. Hy-Dynamic now operates as a division of Bucyrus-Erie Co.

## BUCYRUS-ERIE TODAY

Bucyrus-Erie Company ranks today as one of the world's leading manufacturers of mining and construction machinery. Its product line is well positioned to take advantage of the increased requirements projected for major segments of these markets.

Large B-E excavators and blast hole drills are used in surface mining of coal, phosphate, iron and copper, as well as for other minerals.

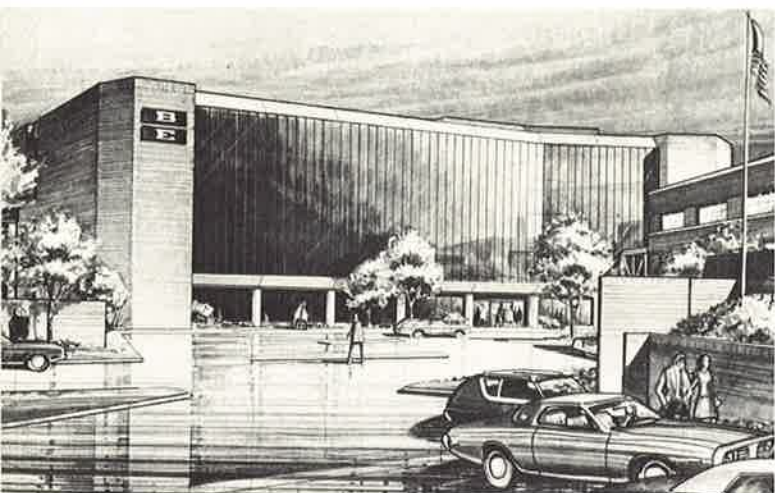
Hydraulic and mechanical excavators are used to dig trenches for sewer and water lines and for petroleum and gas pipelines.

A broad line of B-E mobile cranes, both self-propelled and crawler-mounted, fills requirements for erection of power plants, dams, bridges and mass transit systems. These excavators and cranes, of course, are also widely used in all other types of commercial and residential construction.

To serve offshore drillers for oil and natural gas, a new line of specially designed marine cranes is used for drillships, drilling and production platforms and semi-submersible drill rigs and for other marine and harbor uses.

Research and development efforts continue to add new products and improve established product lines. Bucyrus-Erie, Ruston-Bucyrus and Komatsu-Bucyrus engineering departments collaborate to design and build "Bucyrus" construction machinery that will satisfy the diverse construction machinery requirements abroad as well as domestically.





Artist's rendering of the new Bucyrus-Erie office building at South Milwaukee.

Bucyrus-Erie mining machinery is widely used for surface mining of coal, which now accounts for over 50 percent of all coal mined in the U.S. New blast hole drill, mining shovel and stripping dragline models are being placed into service to serve this expanding surface mining industry and in iron and copper mines.

The Company has an international network of mining machinery Parts Depots, bringing off-the-shelf service to mine operators in 11 major mining regions in Canada, the United States, and Australia.

B-E has a stable, well-financed international distributor organization consisting of 104 independently owned distributors active in 123 countries. The Company has its own international sales representatives to assist these distributors.

An organization is only as good as its leadership, and Bucyrus-Erie is very fortunate today to be guided by an experienced, aggressive management team, led by its president and chairman, Eugene P. Berg. Berg, an engineering graduate of Purdue University, holds a master's degree in business administration from the University of Chicago. He came to B-E in 1960 as executive vice president, bringing with him 23 years of manufacturing experience. Mr. Berg was named president of the Company in December, 1962, and chairman of the board in August, 1963.

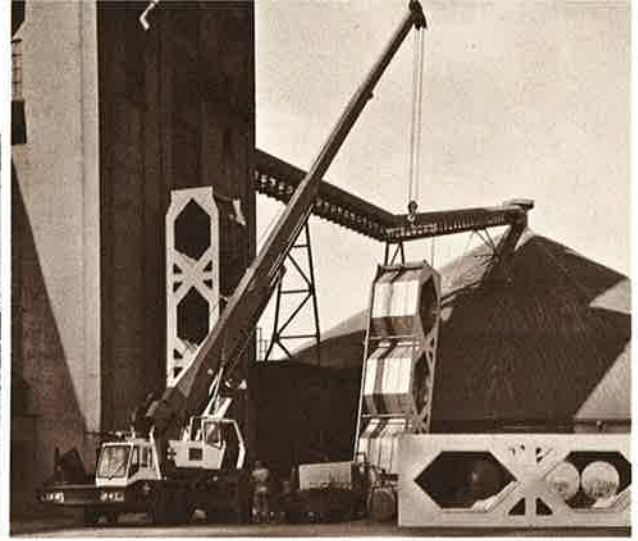


Eugene P. Berg, chairman of the board and president of Bucyrus-Erie Company.

Present officers of the Company, in addition to Mr. Berg, are Norris K. Ekstrom, vice president, treasurer and controller and a director of the Company; Howard Freyensee, vice president-sales; Frank J. Hill, vice president; John A. Thierry, vice president, secretary and a director of the Company; and William B. Winter, vice president. It is this team which has led Bucyrus-Erie to its pre-eminent position as one of the world's largest manufacturers of construction and mining equipment, ranking with the foremost capital goods manufacturers in the United States.



The basement of the present Conrad Hilton Hotel on Chicago's Michigan Avenue was excavated with these Bucyrus 20-B and 30-B steam shovels. Photo was taken about 1925.



A considerably more recent product of B-E's Evansville plant is this modern 45-C hydraulic crane, here erecting a 3-ton grain dryer in Bellevue, Ohio.



This fully-revolving Erie-B steam shovel was developed in 1914 by the Ball Engine Company, predecessor to the Erie Steam Shovel Company.



This modern 20-H hydraulic excavator is manufactured at B-E's 660,000 square-foot Erie plant.



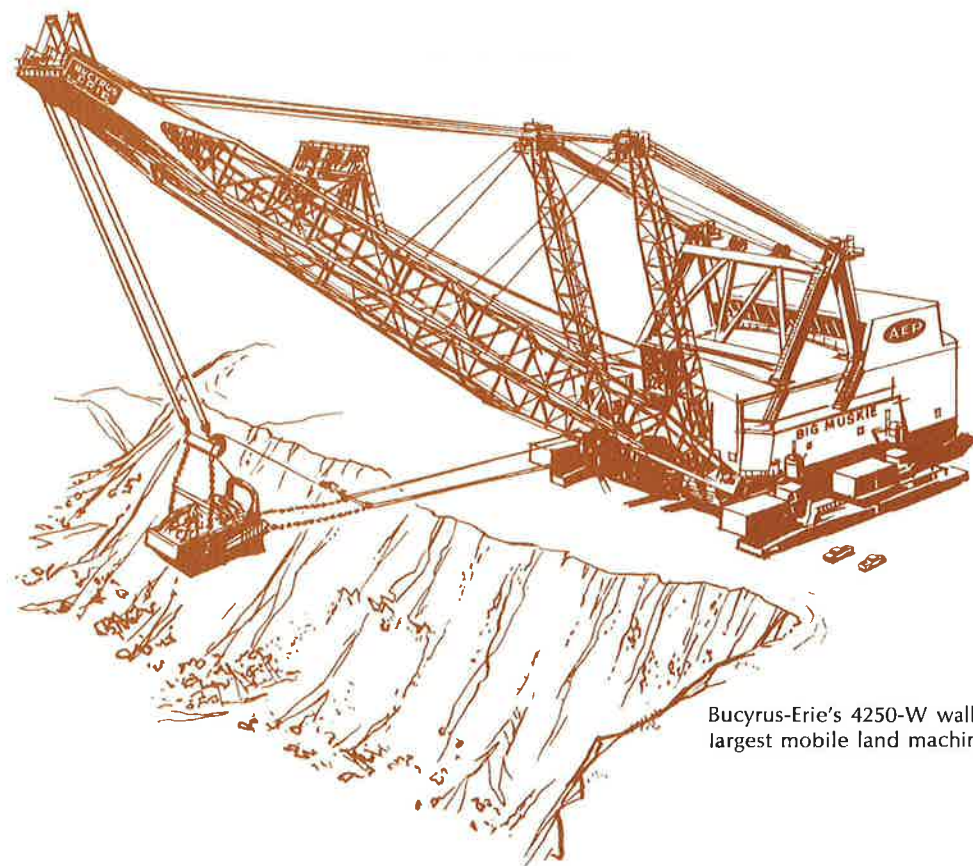
This early Bucyrus railroad shovel, carrying a 1¼ cubic yard dipper, was built in 1882.



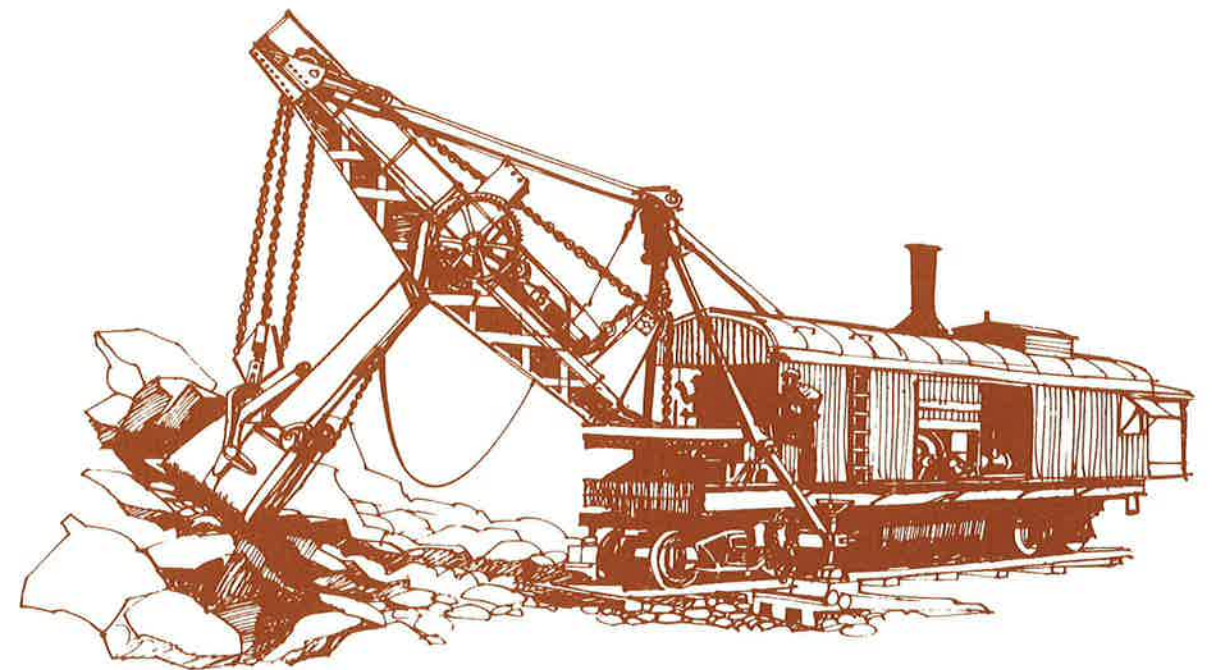
This giant \$20 million walking dragline, built by Bucyrus-Erie, is the largest in the world, with a bucket capacity of 220 cubic yards.



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