

George B. Harrington.
Coal Mining in Illinois. [Newcomen Soc.
Lecture, Chicago, 1950]

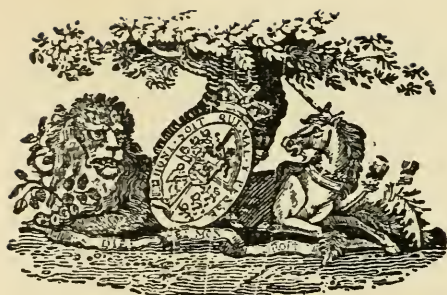
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ILLINOIS HISTORICAL SURVEY

Coal Mining
in
Illinois

GEORGE B. HARRINGTON





“Were American Newcomen to do naught else, our work is well done if we succeed in sharing with America a strengthened inspiration to continue the struggle towards a nobler Civilization—through wider knowledge and understanding of the hopes, ambitions, and deeds of leaders in the past who have upheld Civilization’s material progress. As we look backward, let us look forward.”

—CHARLES PENROSE
*Senior Vice-President for North America
The Newcomen Society of England*



This statement, crystallizing a broad purpose of the Society, was first read at the Newcomen Meeting at New York World’s Fair on August 5, 1939, when American Newcomen were guests of The British Government

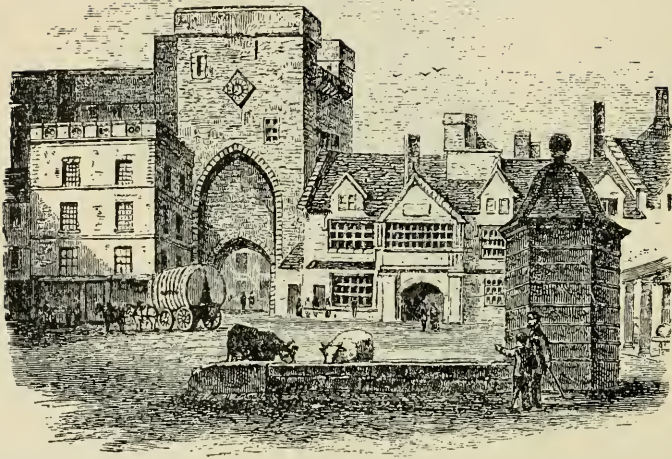
“Actorum Memores simul affectamus Agenda”

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COAL MINING IN ILLINOIS
A Newcomen Address at Chicago

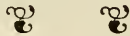


AMERICAN NEWCOMEN, *through the years, has honored numerous industries in the United States of America and in Canada, and has honored the memories of men whose courageous enterprise, vision, daring, determination, and unfaltering Faith have laid the foundations of industrial properties that have been vital in the development and utilization of natural resources. Contributions of high importance to national economies have resulted. Such a Newcomen manuscript is this, dealing with the history of Coal Mining in Illinois. It is a colorful and dramatic recital of deep human interest—another chapter in the far-flung history of Industrial Development in America!*



“It is a real honor, which I appreciate, to be asked to address this Chicago meeting of The Newcomen Society.”

—GEORGE B. HARRINGTON



Coal Mining *in* Illinois

GEORGE B. HARRINGTON

MEMBER OF THE NEWCOMEN SOCIETY

PRESIDENT

CHICAGO, WILMINGTON & FRANKLIN COAL CO.

CHICAGO



THE NEWCOMEN SOCIETY IN NORTH AMERICA
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1950

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GEORGE B. HARRINGTON



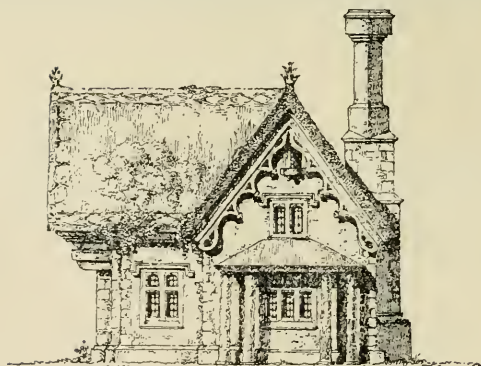
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*The Newcomen Society, as a body,
is not responsible for opinions
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*This Newcomen Address, dealing with the his-
tory of Coal Mining in Illinois, was delivered
during the "1949 Chicago Dinner" of The
Newcomen Society of England, at which Mr.
Harrington was the guest of honor, held in
Cathedral Hall at the University Club of
Chicago, in Chicago, Illinois, U.S.A.,
on November 3, 1949*



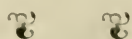
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“The first record of coal in these United States of America happens to have been in Illinois,—near Ottawa on the Illinois River, *back about 1673*. And, though mining did not start out here until nearly 180 years later, yet Illinois always has held an important place in bituminous mining.”

—GEORGE B. HARRINGTON



Biographical Sketch of The Author



Year by year, during a full dozen years past, our Chicago Newcomen have given consideration, in *Newcomen Addresses*, to the leading industries found in the Middle West and in the Great Lakes Basin. These important manuscripts have been delivered by members whose experience and responsibilities qualify them to speak with authority. None better could discuss Coal Mining in Illinois than the distinguished President of the Chicago, Wilmington & Franklin Coal Company: GEORGE BATES HARRINGTON of Chicago. Native of Delaware, Mr. Harrington graduated at Princeton University, in the Class of 1902, and at Massachusetts Institute of Technology, in Mining Engineering, in 1904. In that year, he began as a Mining Engineer in Mexico, and later in Western U.S.A. Since 1914, he has been a resident of Chicago. Many recognitions have come to him. Is a director and member of Executive Committee, in National Coal Association; a director and member of Policy Committee, in Bituminous Coal Institute; and member of Advisory Council, in Coal Division of American Mining Congress. Serves on numerous boards of direction, including: Illinois Coal Operators Association; Southern Illinois Coals, Inc.; and others. Takes active part in Chicago Association of Commerce. In 1944, was awarded The William Lawrence Saunders Gold Medal for distinguished achievement in Mining, by American Institute of Mining & Metallurgical Engineers. Mine operator, mining engineer, business executive, good citizen, Mr. Harrington is a member of the Chicago Committee, in The Newcomen Society of England.



HIS MARK



My fellow members of Newcomen:

IT IS A REAL HONOR, which I appreciate, to be asked to address this Chicago meeting of The Newcomen Society.

Except that I thought a better job might be done on historical features if my subject is limited to "*Coal Mining in Illinois*," the task would have been little different if we had said *Coal Mining in the Midwest*, or even *in the Nation*, as the story is much the same. It would have been nice if earlier today we could have visited together some of our great Illinois mine properties,—but they are too far away.



You have noted, I hope, *here on the tables before you*, some *specimens* of Illinois coal. So many of my friends ask: "Is your coal *soft* coal or *hard* coal?"—I thought I would let you feel it for yourselves. Seriously, "hard coal," or Anthracite, comes all from a few counties in Pennsylvania and no longer gets out this way enough to have much influence upon our Illinois situation. What-

ever I say refers only to *bituminous*,—sometimes inelegantly called “soft coal.”



The first record of coal in these United States of America happens to have been in Illinois,—near Ottawa on the Illinois River, *back about 1673*. And, though mining did not start out here until nearly 180 years later, yet Illinois always has held an important place in bituminous mining.

Illinois production was at first small, along streams and near towns, and was consumed locally. Then development pretty much followed railroad expansion, beginning in Southern counties East of St. Louis and soon coming North to the thin seams Southwest of Chicago. Not until 1862 did the State of Illinois produce 1,000,000 tons. By 1900, there was a tendency for production to work southward, seeking thicker coal.



In 1947, Illinois had 39 surface mines and 120 underground mines, employed 31,400 men, and had dug 68 million tons valued at 214 million dollars at the mines. Peabody Coal, with 11½ million tons, was much our largest digger, and ranked third in the Nation. Old Ben Coal with 5 million tons of Illinois production was second, followed by my own Company, then by United Electric, by Superior Coal, Truax Traer, The Consolidated Coal Co., and so on. Peabody enjoys much of the Commonwealth Edison System of Chicago business—banner Illinois consumer burning in 1947 8,700,000 tons, notwithstanding having cut consumption per kilowatt-hour *in half* since 1917. Illinois was fourth ranking producer with nearly 11 percent of the Nation's 630 million tons; and Chicago generally is referred to as the World's largest coal market.



There are no “giant” producers in this Coal Mining Industry. The largest corporate organization, in 1948, mined 4.6 percent of the Nation's output; and only *eleven* company groups under single management produced as much as 1 percent each.

Coal production has not increased materially since the late '20's, after which came the big slump of the '30's. An economic recovery in the '40's carried totals to slightly new highs. But, particularly since the Second World War, there have been many changes in bituminous production. There has been a steady increase in mechanized mining underground as well as an increased percentage of production from surface mines. 50 percent more coal was mined with 5 percent less men. Tons per man-hour are up. Far more coal now is mechanically cleaned. Comparing 1935-1939 averages with 1948, average *hourly* earnings of men have increased from \$0.832 to \$1.899. The mine workers have achieved paid holidays and free pension and welfare benefits. Average costs of production, and also sales prices, have about doubled.



While consumption of coal has shrunk somewhat, resulting from more efficient use and because of tremendously increased production of petroleum and natural gas, it is estimated that coal still is the source of more than half of the World's energy, and of that of the United States; and there is no indication of abdication on the part of King Coal. Coal has increased for electrical energy and has not slipped in its use for by-product, coke, and steel making, or for many other classifications. Dieselization on the railroads is reducing coal's railroad market. Industry-sponsored research is working on an experimental coal-burning *gas turbine* locomotive.



The manufacture of *coal gas* is an old story and it is insurance against possible failures of natural gas supply, such as have happened. Synthetic oils and gasoline *can* and probably will be made from coal, if costs of doing it can be reduced or if the supply of petroleum becomes insufficient. Atomic energy does not yet threaten coal; and some day we may perfect a practical *gasification of coal in the ground* and thus increase coal reserves.



Largest known coal reserves, on paper, are out West:—in Wyoming, North Dakota, Montana, and Colorado, and are mostly

of lignite and sub-bituminous grade. Three-quarters of Illinois is underlaid with coal, making our State *fifth* in reserves, with an estimated 196 thousand million tons. Much of the most desirable or more easily dug coal has been mined or worked on, and a substantial part of the so-called reserves are at present of somewhat secondary desirability.



Here in Illinois, the *coal seams* are generally more regular and thicker, than in Appalachian for instance. This may account for our having most of the largest *single underground mine units* anywhere, which are chiefly in our Franklin and Christian Counties.



Coal Mining has made a splendid record for safety, consistently reducing both fatal and non-fatal accidents. An eminent retired U. S. Bureau of Mines authority said recently on the radio: "a lot of talk about coal mine injuries is just plain bunk."



Surface mining, where the overburden is stripped, has had large growth in the last two decades in Illinois and in the Midwest; and, more recently, in the Appalachian States. Illinois boasts the largest strip pits; and, I suspect, has some of the most efficient. Strippers now account for 30 percent of Illinois production.



Our industry for years has been badly handicapped by frequent strikes. Recently, we have had an aggravated visitation of this affliction, made less bearable because of the often unexpected and seemingly unnecessary character of the work stoppages. It must be a great help to our oil competition, and to other substitutes for coal, to have the coal supply kept so absolutely *undependable* by the unbelievably uncontrolled whims of the union top command.



However, this being an historical discussion, I must tell you that once, about 1934, when we were struggling through the shadow

of the valley of industrial death, we persuaded the same union chieftain with whom we now talk less successfully, that Illinois could not live without *downward relief* on the mine wage scale. This chieftain, having been convinced, courageously came to our State despite threats of bodily harm, and he personally advocated an unpopular wage reduction of \$1.10 per day. There was a referendum vote; after which the reduction became effective and turned out to be a real help towards our financial recovery.



But those were not all happy days. Quite often, in the drab '30's, things were rough. We, in our industry, had investigations and fact-finding seances; and shared with all of you the pangs of "N.R.A." and *The New Deal*. And we had our own Coal Conservation Act of 1937—the so-called *Guffey* Bill if you liked it,—or the *Goofey* Bill if you didn't. I myself spent weeks helping to write a Code,—like a drowning sailor grasping at straws. On that effort, be it recorded, Illinois coal operators had full cooperation from our Mine Workers union. I say "our" union, because somewhere along the rocky road *a rival union*, the Progressives, had been born. There now are about 10,000 Progressive mine workers in Illinois, their chief stronghold, as compared with 21,000 Illinois United Mine Workers.



Because it is so typical of the history of Coal Mining in Illinois, I shall give you a sketch of my own organization since its founding 83 years ago. Chicago & Wilmington Coal Company started *in 1866*, with its first mine in the Wilmington field, near Braidwood, 54 miles South of Chicago. In 1871, consolidation with Vermillion Coal Company formed the \$2,000,000 Chicago, Wilmington & Vermillion Coal Company. Then, for about 40 years, fairly equal outputs were maintained of Wilmington coal and of coal from around Streator on the Vermillion River in Illinois. A remarkably consistent dividend record offsets periodical references in annual reports to long strikes, exceptionally mild Winters, national depressions, and recurrent other difficulties.

J. M. Walker of Chicago was President from 1866 to 1880;

followed by Francis Bartlett of Boston, until 1891. Mr. Bartlett was a director for 36 years. Nathaniel Thayer or his son, Jr., were Directors also for 36 years, Thayer Jr. being President briefly in 1891. Then came A. L. Sweet of Chicago, as officer or director for 35 years, including President for 18 years and Chairman for 3 more. T. A. Lemmon of Chicago was director for 28 years and President for 3. Eugene V. R. Thayer, of Boston and New York, latterly President of The Chase National Bank of the City of New York, was a director from 1904 until his death in 1937, about 33 years. Our present Chairman, L. B. Buchanan, and Director Edwin S. Webster, both of Boston, have held their posts for nearly 35 years.



During all this period, the game was to buy, develop, mine out, write off, and replace such acreage of coal as was needed, always looking ahead and watching competitive changes.



In the late '90's, the Company was feeling the competition of more cheaply mined, thick-seam coal from Central and Southern Illinois. About 1900, a promising property in Central Illinois, with 7 to 8 feet of coal, was acquired and developed. This mine, named Thayer, never proved to be very successful. In 1911, 6000 acres of Franklin County coal, adjoining Joe Leiter's Zeigler mine, was purchased. A large mine, named Orient, was started on the 9 to 11 foot-thick No. 6 Seam, lying 515 feet below the surface. This mine did turn out well, eventually, but not until under-estimated financial needs and other circumstances had brought a receivership, in 1914, from which emerged the present *Chicago, Wilmington & Franklin Coal Company*. Early in 1915, I became the sixth President of this Illinois coal mining organization. We completed the Orient mine, and it has been most satisfactory. Orient first set a day's World's Record at 6008 tons, which Zeigler soon beat. Then we trained and did a new one, in 1922, at 8217. Meanwhile, we had acquired two adjacent mines at Benton, and a half-interest with Inland Steel in two mines at Herrin. In 1921, we commenced development of a second large unit, called New Orient, which,

in 1928, hung up a new *single shift* production record of 15,174 tons, which happened to fill about 375 railroad cars.



But, here again, the history of many mining companies threatens to repeat itself. Both of the great Orient mines are finding their underground hauls long and their unmined areas *limited*. Like many of their neighbors in this great field, which produces the highest quality of coal in Illinois and the Midwest, they are becoming "old" mines and their numbers will soon "be up." We feel fortunate however that, following years of quiet effort, we have been able to secure a well-blocked-out area of 14,000 acres, or 22 square miles, of coal closely comparable with the Orients, in the northern part of this same wonderful coal field. The No. 6 Seam, up there, is *800 feet below the surface*, but is thick and clean. We now have twin 2800-foot, 16-degree slopes completed to the coal, and one vertical man-shaft, and have another airshaft a mile West, on its way down. Colonel Ralph Budd's Burlington Railroad is already connected with this new mine,—Orient No. 3. The Illinois Central and the Missouri Pacific are building in. We have about \$6,000,000 worth of a \$9,000,000 job already well along, and will hope to reach within a few years a production of about *14,000 tons per day of two 7 hour shifts*.



Before my coming to Chicago, in 1914, big names in coal mining in Illinois included: Francis S. Peabody, Grandfather of the present President of Peabody Coal; Joseph Leiter; A. J. Moorshead; Theodore C. Keller; Colonel W. P. Rend; Charles Moderwell; Glenn W. Traer; S. M. Dalzell; M. D. Buchanan; and his son, D. W.; W. J. Jenkins; Herbert E. Bell; and others, many of whom still carry on. Strip mining started later, but also has developed some great names—such as Tom Mullins; Harold Truax; Hubert Howard; and Frank Kolbe.



Time permits only the briefest reference to our good fortune, since 1941, in being *anointed* (so to speak) *with oil* from some 200 producing wells on our Orient property, in the Benton Pool.

This experience was not precisely planned that way, but it was and still is a pleasant happening!



You have been very patient. I have some amusing anecdotes, but no chance to tell them. We must get along:

The up-to-now advanced practice underground has been to cut, drill, shoot, and mechanically load the coal,—*four* separate steps. The hoped-for and probably soon to be successful practice will be to do these four things *in one operation* with the CONTINUOUS MINER, or with some similar machine designed for the same purpose. A big saving in high-priced labor is the goal.



What this Industry needs however is not only CONTINUOUS MINING mechanically, by introduction of great machines, but, and desperately more important, a return to more sensible *labor relationships* and freedom from interference with operation and use of mine plants,—a really CONTINUOUS MINING, with deliverance from spurious strikes such as have become far too numerous.



Coal Mining already pays the highest wages in all industry, for the shortest working hours; and already pays more for non-contributory pensions and for welfare benefits than is being fought for currently by the Steel unions. In order to be able to continue paying these high wage costs, coal operators *must* have relief from the present unbelievable abuse of the so-called “willing and able” buncombe; they *must* have a chance to give coal consumers some semblance of dependable coal supply.



This is *the crux* of the present mine wage contract deadlock!

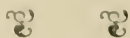
THE END



“Actorum Memores simul affectamus Agenda!”

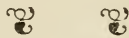


THIS NEWCOMEN ADDRESS, *dealing with the history of Coal Mining in Illinois*, was delivered during the "1949 Chicago Dinner" of *The Newcomen Society of England*, held in *Cathedral Hall at the University Club of Chicago*, in *Chicago, Illinois, U.S.A.*, on November 3, 1949. MR. HARRINGTON, *the guest of honor*, was introduced by COLONEL RALPH BUDD, *Chairman of the Board, Chicago Transit Authority; formerly President, The Chicago, Burlington & Quincy Railroad Company; Senior Vice-Chairman of the Chicago Committee, in The Newcomen Society*. The dinner was presided over by GENERAL CHARLES G. DAWES, *chairman of the Board, City National Bank & Trust Company of Chicago; former Vice-President of the United States of America; former Ambassador to the Court of St. James; Chairman of the Chicago Committee, in American Newcomen*.





“THE COAL MINE” at The Museum of Science and Industry, in Jackson Park at Chicago, was placed at disposal of Newcomen members by MAJOR LENOX R. LOHR, President of the Museum, a member of the Chicago Newcomen. Accordingly, on the afternoon of November 3, 1949, the Newcomen group visited the Museum and saw the full-size reconstructed Southern Illinois Coal Mine in operation.





“Before my coming to Chicago, in 1914, big names in coal mining in Illinois included: Francis S. Peabody, Grandfather of the present President of Peabody Coal; Joseph Leiter; A. J. Moorshead; Theodore C. Keller; Colonel W. P. Rend; Charles Moderwell; Glenn W. Traer; S. M. Dalzell; M. D. Buchanan; and his son, D. W.; W. J. Jenkins; Herbert E. Bell; and others, many of whom still carry on. Strip mining started later, but also has developed some great names—such as Tom Mullins; Harold Truax; Hubert Howard; and Frank Kolbe.”

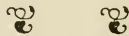
—GEORGE B. HARRINGTON

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“A further word as to leaders whose work, during their lives, made great contributions to Coal Mining in the State of Illinois. I already have mentioned their names. “Francis Stuyvesant Peabody (1859-1922), of Chicago, was a graduate of Yale University in the Class of 1881. He entered the coal trade that same year, building up the Peabody Coal Company, of which he was President. He was appointed Chairman of the Coal Production Committee, in the Council of National Defense, in 1917.”

—GEORGE B. HARRINGTON

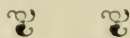


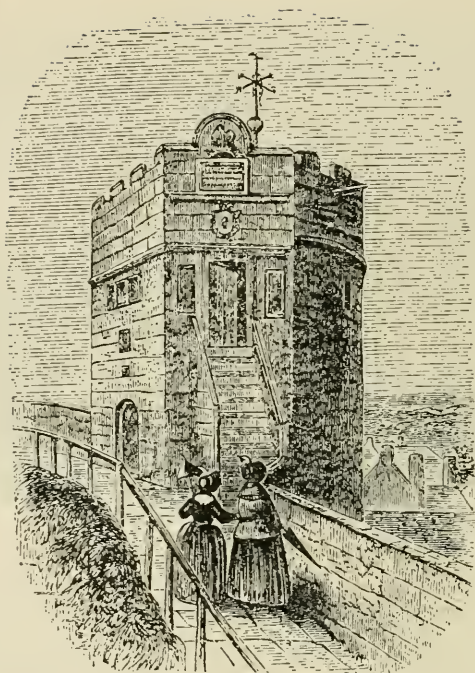


“Another leader:

“Joseph Leiter (1868-1932) of Chicago and Washington was a graduate of Harvard University in the Class of 1891. In the Autumn of 1897, he bought wheat on the Chicago Board of Trade to such an extent as to make him, at the beginning of 1898, the largest individual holder of wheat in the history of the grain trade. He served as President of Zeigler Coal Company. His coal mining operations were on an extensive scale.”

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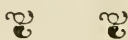


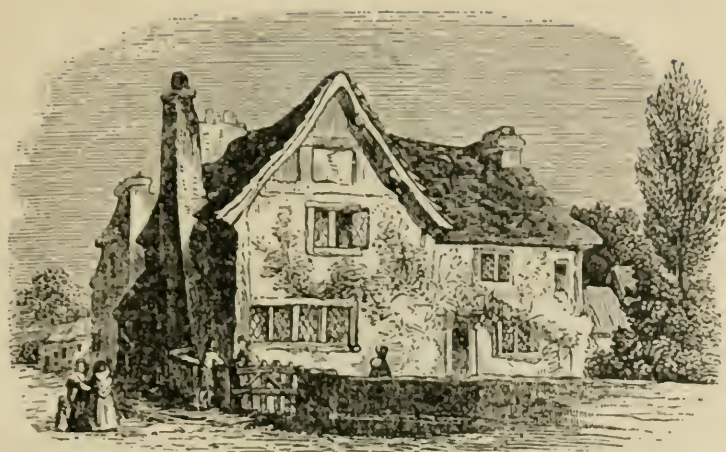


“One more leader:

“Colonel William Patrick Rend (1840-1915) of Chicago was born in County Leitrim, Ireland; came to America in 1847, at age of 7 years. Served in 14th New York Volunteers, during the War between the States. Organized the firm of W. P. Rend & Company, owning large coal mines in Ohio and Pennsylvania. Did much for the Coal Mining Industry.”

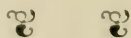
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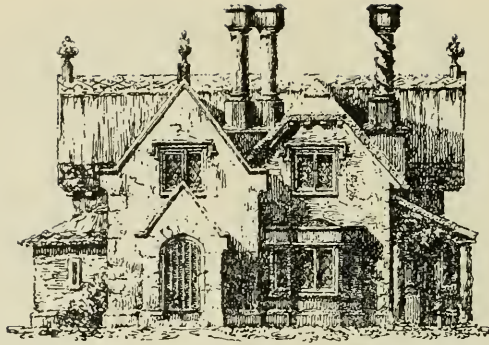




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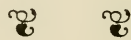




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“What this Industry needs however is not only CONTINUOUS MINING mechanically, by introduction of great machines, but, and desperately more important, a return to more sensible *labor relationships* and freedom from interference with operation and use of mine plants,—a really CONTINUOUS MINING, with deliverance from spurious strikes such as have become far too numerous.”

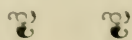
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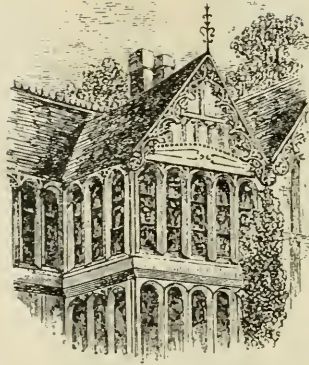




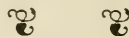
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AMERICAN NEWCOMEN, *interested always in Mining History in whatever fields, and likewise interested always in the doings of pioneer leaders whose efforts have made possible great mining enterprises, takes satisfaction in this Newcomen manuscript dealing with Coal Mining in Illinois. It is a story both of physical courage and of economic courage. It is a history of human endeavor, often under greatest difficulties, to meet a vital need by American Industry—in the broadest sense. It might be said that Modern Civilization, to large extent is dependent upon Coal Mining and upon Coal! Such is the historical recital with which these pages have been concerned. They have meaning for America!*



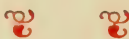


THE NEWCOMEN SOCIETY OF ENGLAND IN NORTH AMERICA

BROADLY, *this British Society has as its purposes: to increase an appreciation of American-British traditions and ideals in the Arts and Sciences, especially in that bond of sympathy for the cultural and spiritual forces which are common to the two countries; and, secondly, to serve as another link in the intimately friendly relations existing between Great Britain and the United States of America.*

The Newcomen Society centers its work in the history of Material Civilization, the history of: Industry, Invention, Engineering, Transportation, the Utilities, Communication, Mining, Agriculture, Finance, Banking, Economics, Education, and the Law—these and correlated historical fields. In short, the background of those factors which have contributed or are contributing to the progress of Mankind.

The best of British traditions, British scholarship, and British ideals stand back of this honorary society, whose headquarters are at London. Its name perpetuates the life and work of Thomas Newcomen (1663-1729), the British pioneer, whose valuable contributions in improvements to the newly invented Steam Engine brought him lasting fame in the field of the Mechanic Arts. The Newcomen Engines, whose period of use was from 1712 to 1775, paved a way for the Industrial Revolution. Newcomen's inventive genius preceded by more than 50 years the brilliant work in Steam by the world-famous James Watt.





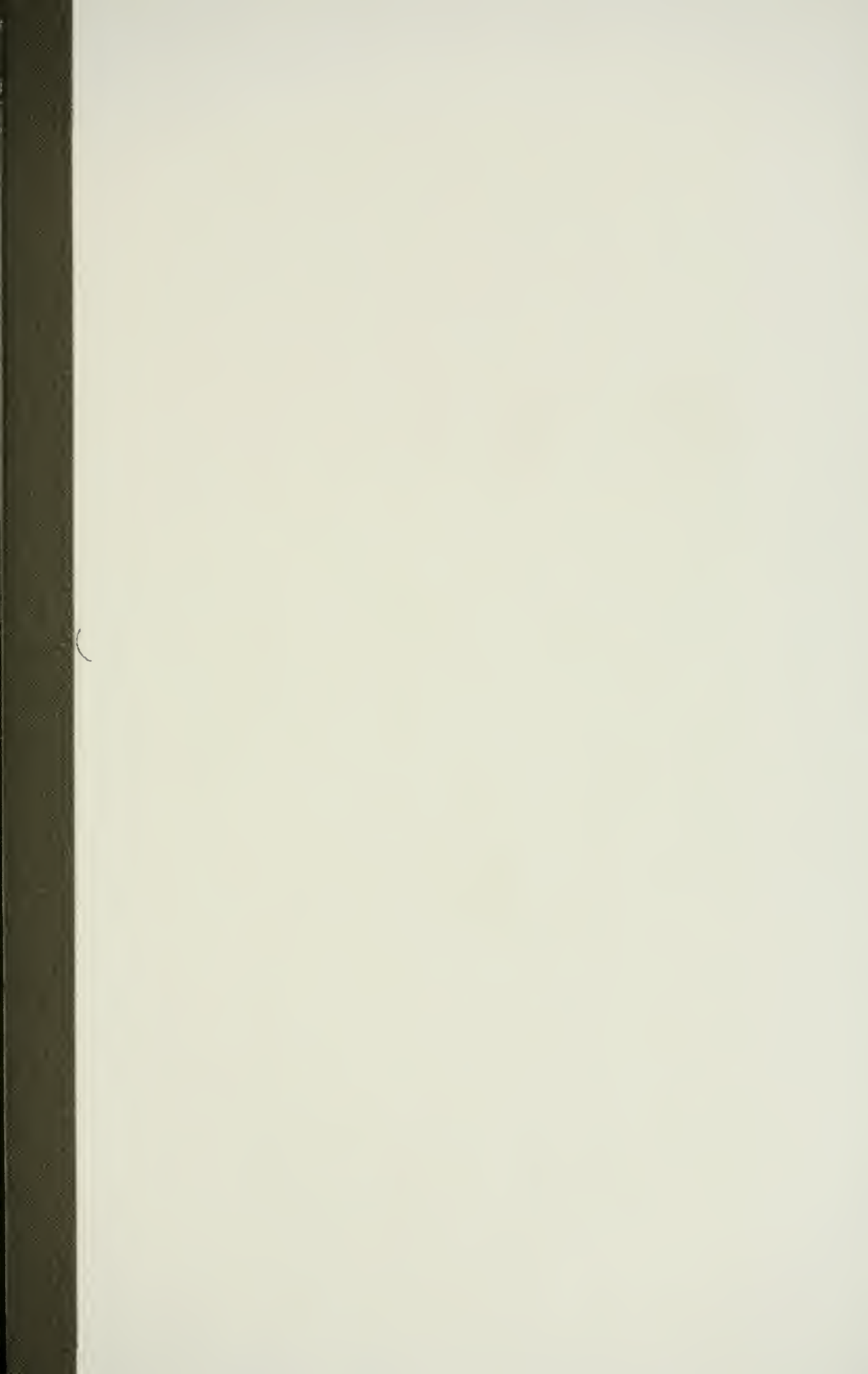
*"The roads you travel so briskly
lead out of dim antiquity,
and you study the past chiefly because
of its bearing on the living present
and its promise for the future."*

—LIEUTENANT GENERAL JAMES G. HARBORD,
K.C.M.G., D.S.M., LL.D., U.S. ARMY (RET.)

(1866-1947)

*Late American Member of Council at London
The Newcomen Society of England*





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