EARLY DAYS OF OIL

A PICTORIAL HISTORY OF THE BEGINNINGS OF THE INDUSTRY IN PENNSYLVANIA

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CHAPTER I

THE BEGINNING

Long before Edwin L. Drake drilled his famous oil well near Titusville, Pennsylvania, petroleum was known to exist and was used in the United States. Seventeenth-century French missionaries allude in their journals to oil in western New York. In the eighteenth century there are reports of a trade in oil brought to Niagara by the Seneca Indians; this probably gave rise to the early name “Seneca Oil” for petroleum. Prior to 1846, however, the greatest source of petroleum in the United States was to be found along Oil Creek in northwestern Pennsylvania. As white settlers moved into this region after the American Revolution and settled along the Creek, they began to skim petroleum from little springs either in the bank or in the actual bed of the stream. They valued and used petroleum exclusively as medicine.

Petroleum was not used in great quantities nor for commercial purposes until about 1847 when Samuel M. Kier of Pittsburgh began bottling and selling petroleum as medicine from his father’s salt wells near Tarentum, Pennsylvania. Despite its low price, Kier could not dispose of all the oil produced by these wells. Having burned crude oil at the Tarentum wells, Kier believed he might use the surplus only some method could be found to eliminate the smoke and odor. After much experimentation Kier devised a crude distillation process, and about 1850 he began to distill petroleum, calling the new product “carbon oil.” Since it was cheaper, safer and better than any existing illuminant, “carbon oil” came into general use in western Pennsylvania and a thriving trade developed in New York City. The demand soon exceeded the supply; the price jumped from seventy-five cents a gallon to $1.50 and then to $2.00. All efforts to increase the supply met with indifferent success until the drilling of the Drake well in August 1859, when Drake solved the perplexing problem and demonstrated petroleum could be secured in sufficient quantities to market it commercially. This epoch-making event marked the launching of the petroleum industry.

Earliest Record of Petroleum in Pennsylvania. Lewis Evans’ Map of the Middle British Colonies in America, published in 1755, is the first record to indicate the presence of petroleum in Pennsylvania. Note that the word “Petroleum” is printed very close to the present site of Oil City.
First Petroleum Shipped to Pittsburgh. About 1790 Nathaniel Carey, one of the first settlers on Oil Creek in northwestern Pennsylvania, began collecting oil from the springs and seepages along Oil Creek and peddling it through the country. Carey is said to have introduced petroleum in Pittsburgh.

Early Quotation on Oil, 1797. General William Wilson kept a general store at Fort Franklin at the junction of French Creek and the Allegheny River. In his Day Book for 1797 an inventory of goods shows "3 Kegs Seneca Oil 50 Dllrs," which is one of the earliest, if not the earliest, records on the price of petroleum.

Collecting Oil on Oil Creek, 1810. In 1810 J. Francis Waldo made a sketch of some men skimming petroleum from a spring on Oil Creek near the present site of Titusville. The oil is being placed in hollowed-out-logs on a raft to be floated down the Creek and the Allegheny River to Pittsburgh.
SAMUEL M. KIER

Impressed by the medicinal value of petroleum, Kier, an owner and operator of canalboats between Pittsburgh and Philadelphia, opened an establishment in Pittsburgh about 1847 where petroleum was put up in half-pint bottles. Through agents who traveled about the country, petroleum was sold to the public as a cure for all ailments, human or animal.

Although Kier widely publicized petroleum as a medicine, his supply of petroleum exceeded the demand, so he concluded that something leading to a more general utilization of oil must be done. After consulting a prominent Philadelphia chemist, Kier became convinced that by distilling petroleum he could obtain an excellent illuminant. Immediately he erected a one-barrel still on Seventh Avenue above Grant Street in Pittsburgh. Here, about 1850, he began to distill petroleum and became America's pioneer oil refiner. The demand for Kier's "carbon oil" was so great that he soon had to install a five-barrel still.

Kier's Advertisement and Circular, describing the wonderful curative properties of Kier's petroleum.

PETROLEUM, OR ROCK OIL.

A NATURAL REMEDY!

PRODUCED FROM A WELL IN ALLEGHENY COUNTY, PA.

FOUR HUNDRED FEET BELOW THE EARTH'S SURFACE.

PUT UP AND SOLD BY

SAMUEL M. KIER,

CANAL BASIN, SEVENTH STREET, PITTSBURGH, PA.

CAUTION—As many persons are now going about and vending an article of a spurious character, calling it Petroleum, or Rock Oil, we would caution the public against all preparations that have not come from the factory of S. M. Kier, located on the Incline in Pittsburgh. This oil, although it is called Petroleum, or Rock Oil, is certainly not so, and must be taken for what it is—a worthless substance that will only injure the patient.

The petroleum prepared by S. M. Kier, is a true natural remedy, and has been used for many years with great success. It is obtained from a well located in Allegheny County, Pennsylvania, at a depth of four hundred feet below the surface of the earth. The oil is pure and uncontaminated, and is sold at a just price.

S. M. Kier

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In the fall of 1853 Francis Beattie Brewer, a graduate of Dartmouth College and a physician in Titusville, Pennsylvania, carried a small bottle of petroleum on a trip to Hanover, New Hampshire to visit relatives and friends. The sample of petroleum had been taken from an oil spring on the farm of Brewer, Watson & Company about two miles south of Titusville. At Dartmouth Dr. Dixi Crosby and Professor O. P. Hubbard examined the oil and pronounced it very valuable.

A few weeks later George H. Bissell, another Dartmouth graduate and a young lawyer in New York City, returned to his home in Hanover, saw the bottle of petroleum in Crosby’s office, and immediately became interested in its commercial possibilities for illuminating purposes. As a result, Bissell and his partner, Jonathan C. Eveleth, in November 1854, bought the farm with the oil springs from Brewer, Watson & Company, organized the Pennsylvania Rock Oil Company of New York on December 30, 1854, and prepared to secure petroleum in large enough quantities to put on the market.

In order to determine the economic value of petroleum and make it easier to sell stock in the new oil company, Eveleth and Bissell engaged one of the most distinguished scientists of the day, Professor Benjamin Silliman, Jr., of Yale College, to analyze the oil.

Completed in April 1855, Silliman’s analysis proved to be a decisive factor in the establishment of the petroleum industry, for it not only dispelled many doubts about petroleum but induced capitalists to invest in the enterprise.
Among the capitalists interested in the venture of Eveleth and Bissell was James M. Townsend, President of the City Savings Bank of New Haven, Connecticut. He and some of his associates induced Eveleth and Bissell to abandon the New York company and incorporate in Connecticut where the property of a stockholder was not liable for the debts of the company as in New York. The Pennsylvania Rock Oil Company of Connecticut, therefore, came into existence on September 18, 1855, and within a short time all the capital had been subscribed, mostly by New Haven men.

Owing to a lack of harmony which unexpectedly developed between the New Haven stockholders and Eveleth and Bissell, Townsend and his associates organized the Seneca Oil Company of Connecticut on March 23, 1858. Then, as majority stockholders of the Pennsylvania Rock Oil Company of Connecticut, they leased the oil farm to themselves as stockholders of the Seneca Oil Company.
On the site of the principal spring of the Brewer, Watson & Company farm, Drake built an engine house, erected a derrick in which to swing the drilling tools, and in it his engine and boiler. An iron pipe was driven 32 feet through the quicksands and clay into bedrock. The drilling tools were placed inside the pipe, and about the middle of August 1859, they began to drill, averaging about three feet a day. On Saturday afternoon, August 27, just as Smith and the workmen were about to quit for the day, the drill dropped into a crevice at 69 feet and slipped down six inches. The men pulled out the tools and went home. Late Sunday afternoon “Uncle Billy,” as Smith was affectionately called, visited the well, peered into the pipe, and saw oil floating on top of the water within a few feet of the derrick floor. They had struck oil! Drake had demonstrated how oil could be secured in greater abundance. He had tapped a vast subterranean deposit of petroleum and thus ushered in a new industry—the petroleum industry.

Born in 1819, Drake spent the early years of his life on a farm first in New York and later in Vermont. With only a common school education, Drake left home at the age of nineteen and became a jack-of-all-trades. In 1849 he worked as a conductor on the New York & New Haven Railroad and lived in New Haven. While living here, he became acquainted with Townsend, who persuaded him to buy some oil stock. During the summer of 1857 Drake fell ill and was forced to give up his work with the railroad. Since he was idle and could obtain a railroad pass, Townsend sent him to Titusville to examine the oil farm. On the basis of Drake’s report Townsend organized the Seneca Oil Company. The stockholders appointed Drake General Agent of the company at an annual salary of $1,000 and sent him to Titusville to drill for oil.

William A. Smith
A blacksmith and experienced well driller from Tarentum employed by Drake to drill for oil at $2.50 a day
THE DRAKE WELL IN 1861

Drake stands in front of his well with Peter Wilson, a Titusville druggist.
Type of Engine and Boiler
Used by Drake

To furnish power for drilling, Drake used a six-horsepower engine and a "Long John" stationary, tubular boiler.

Drake's Drilling Tools

Drake's drilling tools were made by William A. Smith at Tarentum. They weighed 100 pounds and cost $76.50.

The Drake Well in 1884. "Uncle Billy" Smith is sitting on the wheelbarrow in the foreground. The smaller of the two girls, Annette Farwell, now Mrs. Samuel Grumbine, still lives in Titusville.