

EARLY DAYS OF
OIL

*A PICTORIAL HISTORY
OF THE BEGINNINGS OF THE INDUSTRY
IN PENNSYLVANIA*

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PRINCETON, NEW JERSEY

PRINCETON UNIVERSITY PRESS · 1948

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 and Clark's 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.



1745

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.

11.10	4 Axes	10	2.00
78.9	1 Grubbing Hoe	12	1.75
1797	1 Iron Wedge	7	1.00
15	1 Socket	3	1.50
15	1 Small drawing Knife	5	1.10
15	1 Bell	11	1.30
15	1 Round Shave	30	5.50
15	1 Bake Kettle	12	1.26
15	1 Kettle	15	1.50
10	3 Kegs Senica Oil 50 Dlls	8	8.00
6	3 bbl Iron bound & Spirit	45	7.27
1.26	6 D. Old		
1.6	4 Old Rifles		
1.6	2 Hoes without		
			7277

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 Senica 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 an 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.



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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.



952

Kier's Petroleum, or Rock Oil, and the wrapper in which it was sold.

727

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

PETROLEUM, OR ROCK OIL.

A NATURAL REMEDY!

PROCURED 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.

The healthful balm from Nature's secret spring.
The bloom of health, and life, to man will bring;
As from her depths the magic liquid flows,
To calm our sufferings, and assuage our woes.

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 bearing that name not having the name of S. M. KIER written on the label of the bottle.

PETROLEUM.—It is necessary, upon the introduction of a new medicine to the notice of the public, that something should be said in relation to its powers in healing disease, and the manner in which it acts. Man's organization is a complicated one; and to understand the functions of each organ, requires the study of years. But to understand that certain remedies produce certain impressions upon these organs, may be learned by experience in a short time. As by observation in watching the effects of various medicines, that we are enabled to increase the number of curative agents; and when we have discovered a new medicine and attested its merits, it is our duty to bring it before the public, so that the benefits to be derived from it may be more generally diffused, but have no right to hold back a remedy whose powers are calculated to remove pain and to alleviate human suffering and disease. **THE PETROLEUM HAS BEEN FULLY TESTED!** About one year ago, it was placed before the public as **A REMEDY OF WONDERFUL EFFICACY.** Every one not acquainted with its virtues, doubted its healing properties. The cry of humbug was raised against it. It had some friends;—those that were cured through its wonderful agency. These spoke out in its favor. The lame, through its instrumentality, were made to walk—the blind, to see. Those who had suffered for years under the torturing pains of RHEUMATISM, GOUT and NEURALGIA, were restored to health and usefulness. Several who were blind have been made to see, the evidence of which will be placed before you. If you still have doubts, go and ask those who have been cured! Some of them live in our midst, and can answer for themselves. In writing about a medicine, we are aware that we should write TRUTH—that we should make no statements that cannot be proved. We have the witnesses—crowds of them, who will testify in terms stronger than we can write them to the efficacy of this Remedy, who will testify that the PETROLEUM has done for them what no medicine ever could before—cases that were pronounced hopeless, and beyond the reach of remedial means—cases abandoned by Physicians of unquestioned celebrity, have been made to exclaim, "THIS IS THE MOST WONDERFUL REMEDY EVER DISCOVERED!" We will lay before you the certificates of some of the most remarkable cases; to give them all, would require more space than would be allowed by this circular. Since the introduction of the Petroleum, about one year ago, many Physicians have been convinced of its efficacy, and now recommend it in their practice; and we have no doubt that in another year it will stand at the head of the list of valuable Remedies. If the Physicians do not recommend it, the people will have it of themselves—for its transcendent power to heal, still and must become known and appreciated—when the voices of the cured speak out; when the cures themselves stand out in bold relief, and when he who for years has suffered with the tortures and pangs of an inmedicable lesion; that has been shortening his days, and hastening him "to the narrow house appointed for all the living," when he speaks out in its praise, who will doubt it! **THE PETROLEUM IS A NATURAL REMEDY**—it is put up as it flows from the bosom of the earth, without anything being added or taken from it.

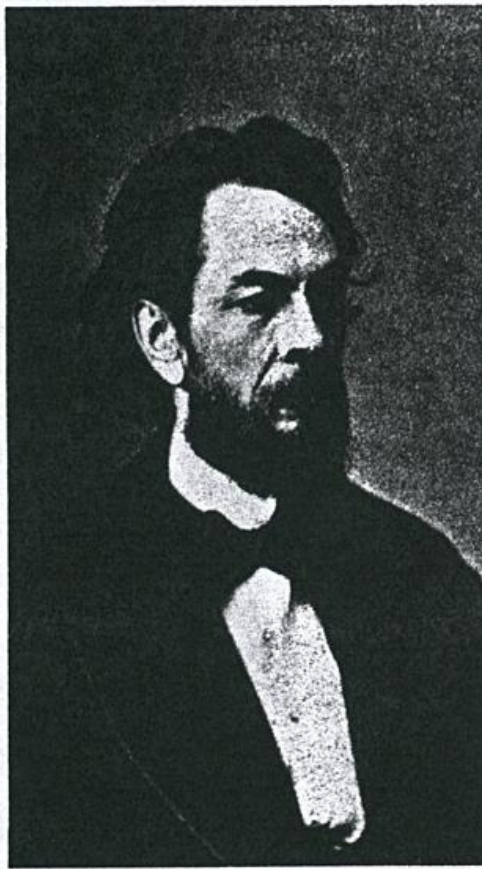
4168



FRANCIS BEATTIE BREWER 1388

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. Dixie 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



GEORGE H. BISSELL 1387



BENJAMIN SILLIMAN, JR. 1384

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.

REPORT
ON THE
ROCK OIL, OR PETROLEUM.

VENANGO CO., PENNSYLVANIA,

WITH SPECIAL REFERENCE TO ITS USE FOR ILLUMINATION AND
OTHER PURPOSES.

BY B. SILLIMAN, JR.,
PROF. OF GENERAL AND APPLIED CHEMISTRY, YALE COLLEGE.

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NEW HAVEN:
FROM J. H. BISHOP'S STEAM POWER PRESS.
1855.

SILLIMAN'S REPORT 1736

office, and immediately became interested in its commercial possibilities for illuminating purposes. As a result, Bissell and his partner, Jonathan G. 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.

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 a 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.



JAMES M. TOWNSEND

1386

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.

Seneca Oil Company, New Haven, Ct.

100,000

CAPITAL STOCK

100,000

This is to certify that

is entitled to

Stock of the **SENECA OIL COMPANY**

transferable only on the Books of the Company by

upon the surrender of this Certificate.

IN TESTIMONY WHEREOF, the said Company have caused this Certificate to be signed by their

President and Secretary

SHARES

100

SHARES

SHARES

100

EACH

Secy

Pres

Printed by Puffer & Co. New Haven, Ct.



EDWIN L. DRAKE

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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 not 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.

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 installed 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.



WILLIAM A. SMITH

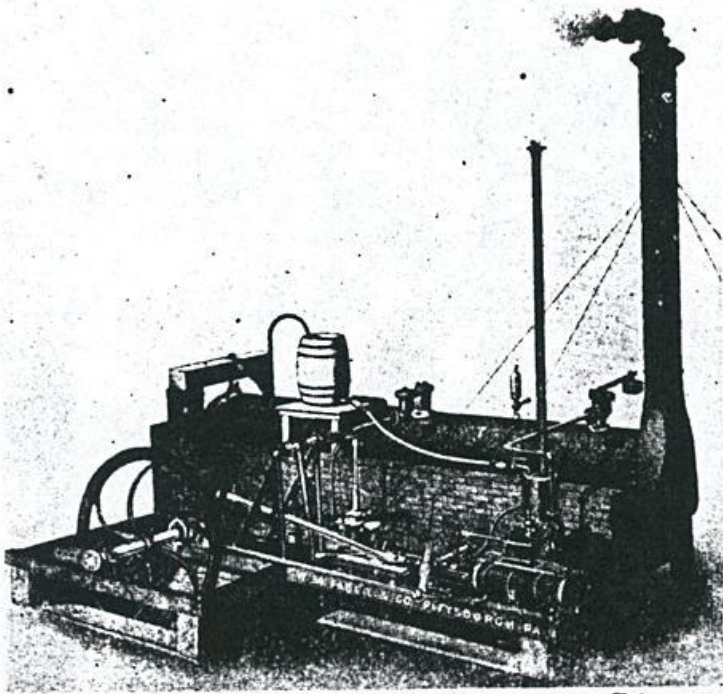
A blacksmith and experienced well driller from Tarentum employed by Drake to drill for oil at \$2.50 a day



THE DRAKE WELL IN 1861

Drake stands in front of his well with Peter Wilson, a Titusville druggist.

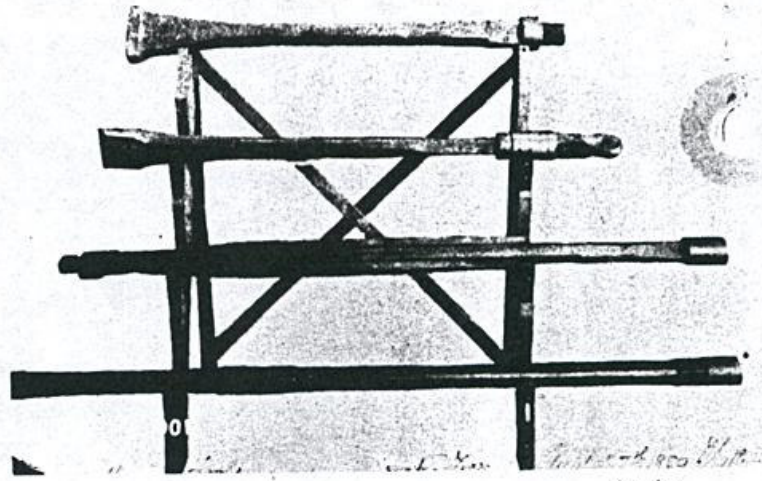
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TYPE OF ENGINE AND BOILER
USED BY DRAKE

7283

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



DRAKE'S DRILLING TOOLS

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



THE DRAKE WELL IN 1864. "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.

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