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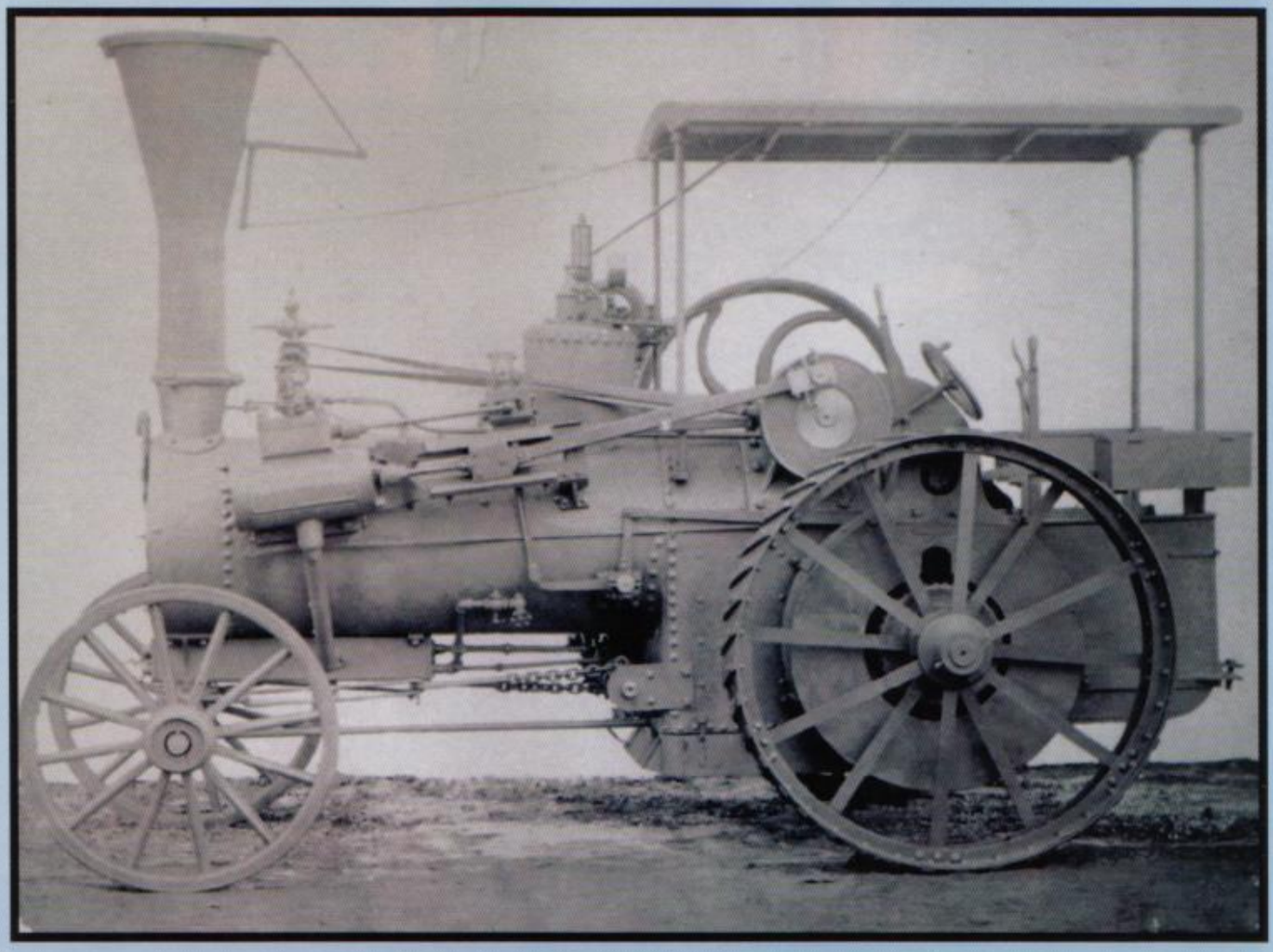
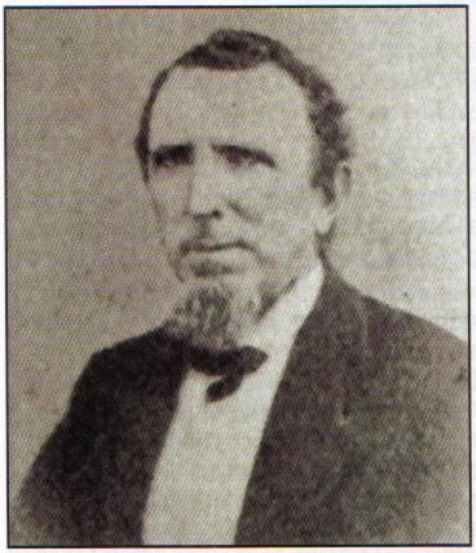


THE BI-MONTHLY MAGAZINE FOR ALL STEAM, GAS, TRACTOR, RAILROAD, LOCOMOTIVE AND FARM MACHINERY ENTHUSIASTS

Surprises in Hamilton, Ohio

By Mark Ohlde, Neal Simpson, and Robert T. Rhode

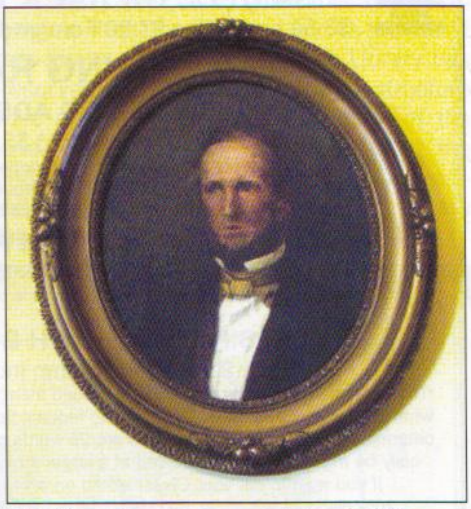


In 1845 in Hamilton, Ohio, Job E. Owens founded an iron stove factory that grew into a steam engine enterprise of considerable magnitude for its day. Photograph of portrait courtesy Neal Simpson

Clark Lane brought his inventive mind to the firm of Owens, Lane & Dyer in 1854, and he wrote an entertaining memoir that brings the past to life.

Much of Hamilton's steam history has been known for some time. Many of those who have studied the topic may have become complacent, assured that most of what is worth knowing about Hamilton's steam engine factories is a matter of record in such publications as *The Steam Tractor Encyclopedia*!

For instance, we have long recognized that Job E. Owens, along with Jacob Ebert and Elbridge Gerry Dyer, founded the firm



Elbridge Gerry Dyer superintended the production of machinery at Owens, Lane & Dyer. His portrait hangs in the Benninghofen House of the Butler County (Ohio) Historical Society. Photograph of portrait courtesy Neal Simpson

On the Cover

Here we have a clear view of Ritchie & Dyer construction details in a photograph that must have been intended to be transformed into a cut, or engraving, for advertising purposes. Such early Ritchie & Dyer engines are almost clones of late Owens, Lane & Dyer engines. Courtesy George C. Cummins Collection of the Lane Public Library of Hamilton, Ohio

In June of 2013, the three of us met in Hamilton, Ohio, to conduct research into that city's contributions to agricultural steam power. What would motivate one of us from Kansas and another of us from New Jersey to drive so far just to dig into collections at the library and the historical society? Big surprises, which we are sharing with you!

The perimeter of a wall map of Hamilton from 1870 includes this sketch of Elbridge Gerry Dyer's home.

Inside this Issue

of Owens, Ebert & Dyer in 1845. Initially, the factory built iron stoves. Helen Kessling's "Faces Out of the Past" suggested that, as early as 1853, Owens, Ebert, and Dyer were producing steam engines. Here is our first surprise, although it may not come as much of a shock. The company did not attempt to build steam engines until 1858. The 1858–59 city directory did not mention that the Hamilton Agricultural Works of Owens, Lane, and Dyer (successors to Owens, Ebert & Dyer) were building steam engines, but the 1861–62 directory did.

As might be expected in the 1850s, Owens, Lane & Dyer sold the Moffitt Patent Thresher. In 1851, John R. Moffitt was living on his father's farm near Canton, Ohio, when the young man built an improved threshing machine. In London, Queen Victoria watched a demonstration of the thresher at the Great Exhibition of 1851, also known as the Crystal Palace Exhibition, and was so delighted with the invention that she met the inventor at her request. Two years later, New York hosted its own Crystal Palace Exhibition, which was called the Exhibition of the Industry of All Nations.

Clark Lane left an unpublished memoir entitled *Reminiscential*, which was typed in 1951, long after Lane's death in 1907, and which the Lane Public Library has. It comes as no surprise that Lane presented the history of his firm accurately. We give you his words (and his spelling) at some length because we believe that he has told his story more faithfully than historians have: "About September first 1853 I visited 'The Chrystal Palace Fair' then being held in the City of New York where I saw much to stimulate ambition … . As a portion of this trip I was duly empowered and ordered by Council for the City of Hamilton to visit the engine works of Wm. Jeffers (I think was the name) at Pawtuckett, R. I. and to buy for said City of Hamilton a 'Jeffers Fire Engine'. Said engine was bought shipped and for many years did the principal effective service toward protection against loss from fire and served the city well until the Paid fire department came into service.

"Immediately after my return from the east—under the name of C. Lane & Co. I began the work of building a smith shop about 26 x 80 feet of brick and three stories high. Owens, Ebert & Dyer were my parties to a half interest in this property and business and I the other one half party.

"With my shop full of mill and machine work we run through the year 1854 until about October. Meantime Jacob Ebert of the above named firm died. For a sum of near $10,000 I bought the Ebert interest from his heirs, and the firm of Owens, Lane & Dyer was formed and business began under that name.

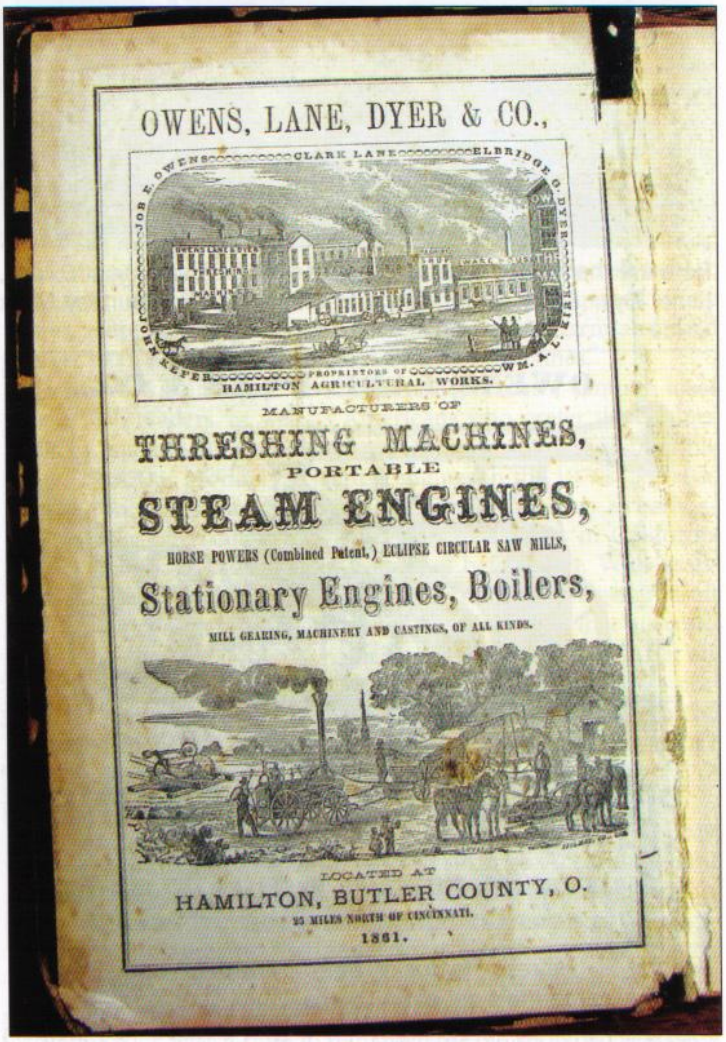
"Beginning with 1855 in connection with a large foundry business already established, and then doing a large amount of grist-mill, paper and saw mill work as Owens, Lane & Dyer we were doing also a considerable of agricultural machine work.

"At this time we began the manufacture of Threshing Machines and horse powers employing near one hundred hands and working up to fullest capacity of both shop room and of all capital we could control.

"For several years it was largely my duty to find, to purchase and

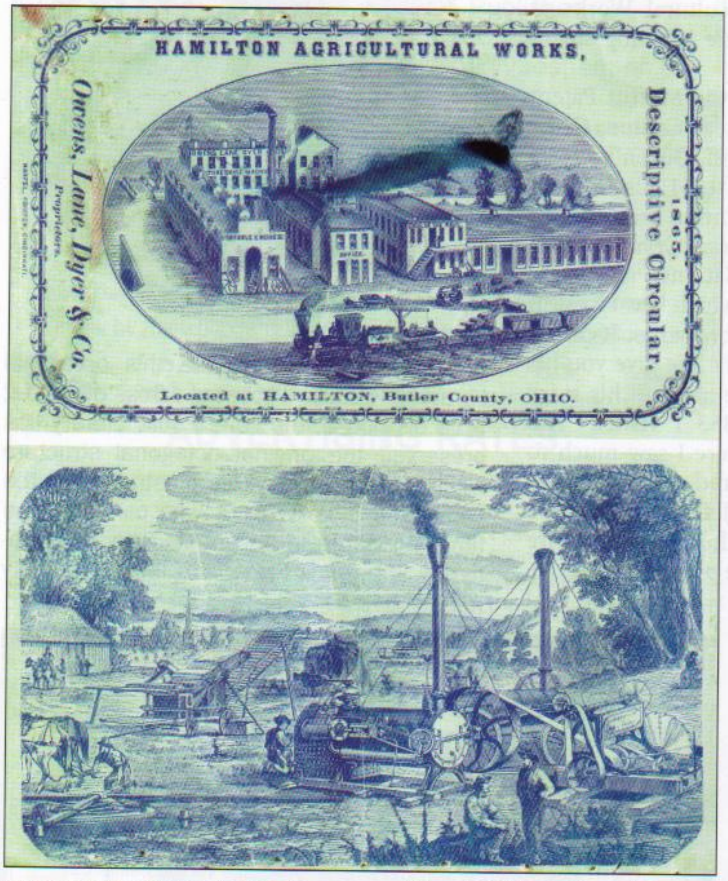
In 1863, Clark Lane had this octagonal house built. It is still standing and is available for tours. Courtesy George C. Cummins Collection of the Lane Public Library of Hamilton, Ohio

In 1866, Clark Lane gave this octagonal library to Hamilton. Located across the street from his house, the Lane Public Library has preserved the original octagonal structure while adding wings. This illustration of the Lane Free Library (as it was called at the time) appeared in an undated booklet entitled *A Souvenir of Hamilton, Ohio*. Courtesy Robert T. Rhode

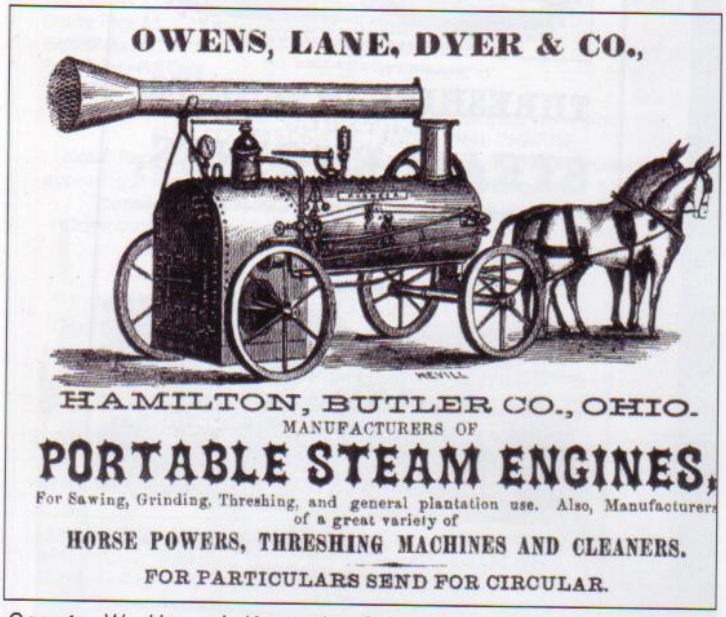


The 1861 Hamilton city directory carried this full-page advertisement of the products of Owens, Lane, Dyer & Co. Photograph of directory courtesy Neal Simpson

to have on hand always ready for use, the lumber, the iron and other supplies requisite for all wants, and as 'Blacksmith' to generally superintend the smithing and wroughtiron department of manufacturing.



Here are the front and back covers of the 1865 catalog of Owens, Lane, Dyer & Co.'s Hamilton Agricultural Works. Courtesy Mark Ohlde



George W. Hawes' Kentucky State Gazetteer and Business Directory carried this cut of an Owens, Lane, Dyer & Co. portable engine named *Pioneer* in 1859. This engine is most likely the portable that British-born Francis Wedge designed for Owens, Lane, Dyer & Co. in the 1850s. Wedge later formed Griffith & Wedge, manufacturers of steam engines in Zanesville, Ohio.

"Mr. Owens being a moulder by trade, superintended the castings department, traveled much, sold our product throughout the South, the North and West and in general way managed the financial interests of the Firm.

"Whilst Mr. Dyer as Machinist rendered most valuable service through a general superintendence of all work tending to the rapid, thorough and perfect production of machinery.

"We prospered, and with each succeeding year, through many years, increased our shop-room as necessity required, and more workmen in due proportion were employed.

"The climax of our business was probably reached within the years 1863–73 when our enterprise throughout its entire scope gave employment to between five and eight hundred persons indoors and out.

"Meantime however through changing interests and other persons becoming parties to and acquiring interest in our business, about 1858 the Style of Firm became Owens, Lane, Dyer & Co. Near seven years afterward a large machinery house was built and well stocked with our make of machinery in the City of St. Louis, Mo. Where a large and prosperous trade was transacted the twelve years next following. Though in a joint stock company was incorporated as Owens, Lane & Dyer Machine Company...

"To them also belong the credit of first manufacture and practical use of wood steam engine and threshers. The first steam engine made for this purpose was built by them early in 1858 and was sold

In a booklet published in 1874 by steam engine and turbine manufacturer James Leffel & Co. of Springfield, Ohio, this advertisement for Owens, Lane, Dyer & Co. appeared.

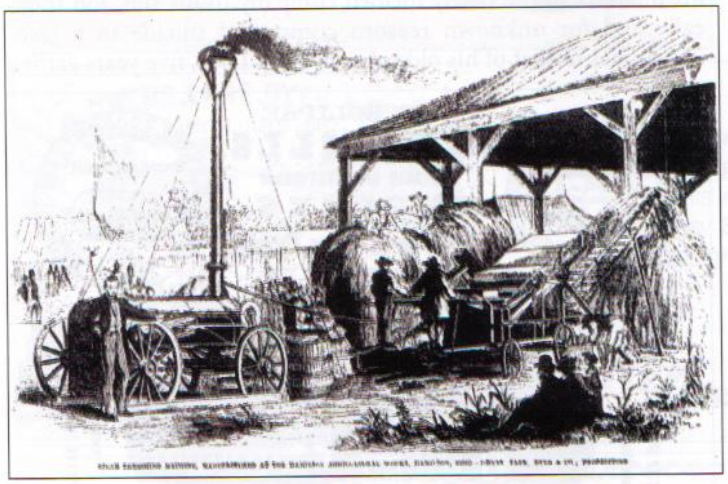
together with a threshing machine adaptable therefor to Van Dyke and Brown June 11, '58 and was successfully operated by them in Butler County, Ohio through the threshing season of that year and also through twenty or more years following 1858. But few years passed til this class of engine was doing almost entirely the fixed power and road service of the farm for threshing purposes and for many other uses.

"The first steam engines sent to California and Oregon were made at the O. L. & D. Co. Shops as early as 1858–60.

"Dozens of them were on the Pacific Coast two years later. Honorable U. S. Senator A. E. Smith of Oregon was first to introduce the 'Steamers' in Oregon.

"Next came the Traction or road engine. This too, was first manufactured and put upon the road in successful form and operation in America by O. L. & D. Co., except however, so far as is known Mr. George Dick then of Ross, Butler Co. Ohio who had visited England for 3,500 gold

Here is a magnificent advertisement for Owens, Lane, Dyer & Co.'s Hamilton Agricultural Works. Dating to the 1860s, the colorful print is in the collection of the famed Golden Lamb Restaurant and Hotel. Photo courtesy Neal Simpson



Here is a cut from page 403 of *Frank Leslie's Illustrated Newspaper* for November 17, 1860. It depicts a portable Owens, Lane, Dyer & Co. steam engine belted to a thresher. Job E. Owens is standing beside the engine.

Here is a later portable engine built by Owens, Lane, Dyer & Co. named *The Hamilton Steam Thresher*. Courtesy Mark Ohlde

bought and imported a ten horse power English made road or Traction engine. This engine was unnecessarily cumbersome and heavy and to American eyes of Awkward appearance, and more or less of complicated construction and impractical for the American want. Though it was very effective on the road as a threshing engine but was too large.

"Beginning with this engine we reduced its weight, modernized and built many Traction engines—the first used in this country. And, though many engine builders have since made still lighter, possibly more fancy styles of engines it is doubtful indeed if any better, more suitable or practicable engine for the farm and road has yet been made to excel the old O. L. & D. Engines."

Here, we will interrupt Lane before he, across a century, loses our British readers, as well as Americans who prefer the engines built by manufacturers other than Owens, Lane & Dyer. While Lane's firm was producing traction engines in the 1870s, Newark, Ohio's iron works was manufacturing traction engines as early as 1858. As Jack Alexander has proved, several firms in California had invented successful traction engines before that. With gratitude for Lane's foresight in leaving a memoir for future generations to appreciate, we will forgive him for the false claim that his company built the first traction engines used in this country. After all, the State Board of Agriculture at the Ohio State Fair in 1874 presented Owens with a gold medal for the firm's portable locomotive engine, so Lane felt justified in making his assertion, even though a company handbill tacitly acknowledged that other firms' road or field locomotives existed.

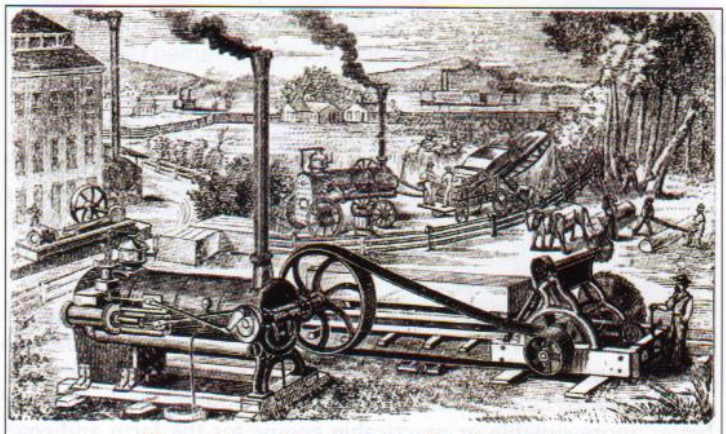
Before we can move forward with what happened next, we must move backward in time to offer another surprise. According to the city directory for 1861–62, the agricultural implement firm of Long, Black & Allstatter was producing steam engines. We might think that the directory had made a mistake, were it not for this statement on page 288 of *The Centennial Anniversary of Hamilton, O.*: "About 1871 Mr. Black retired and the firm became Long & Alstatter [sic], with a right to remain in the old shop two years. Mr. Black conducting a blacksmith and machine shop in the northern part of the premises, where he started into the portable engine

business." Who has seen a Long & Allstatter portable steam engine recently? To our knowledge, no one has!

Owens, Lane & Dyer, Ritchie & Dyer, and Reeves

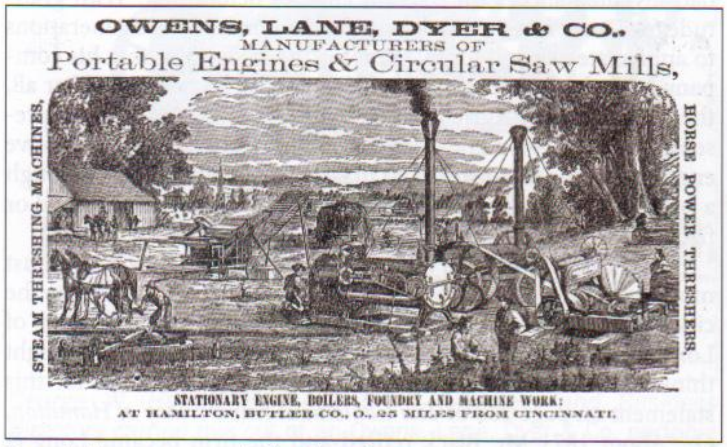
By Mark Ohlde

As we know, in 1876, the Owens, Lane, & Dyer Machine Co. applied for a receiver so as to continue what profitable business they could. Elbridge Gerry Dyer's suicide accompanied the firm's financial woes. Clark Lane was appointed the receiver. He had been working in Elkhart, Indiana, with his son but returned to Hamilton to accept his responsibilities. The late 1870s witnessed an economic downturn with currency deflation and record numbers of farm foreclosures. Owens, Lane, & Dyer was in decline for several years. On August 12, 1871, the firm took the extraordinary step of publishing in *Scientific American* the offer to sell a half interest "in the old and well known firm" for $62,500 citing "limitation" and "partners wishing to retire." Owens, Lane & Dyer went out of business in 1879. Several companies then came into existence, one that would occupy the old factory buildings and another that would continue production and service of the engine and sawmill business of the failed company.



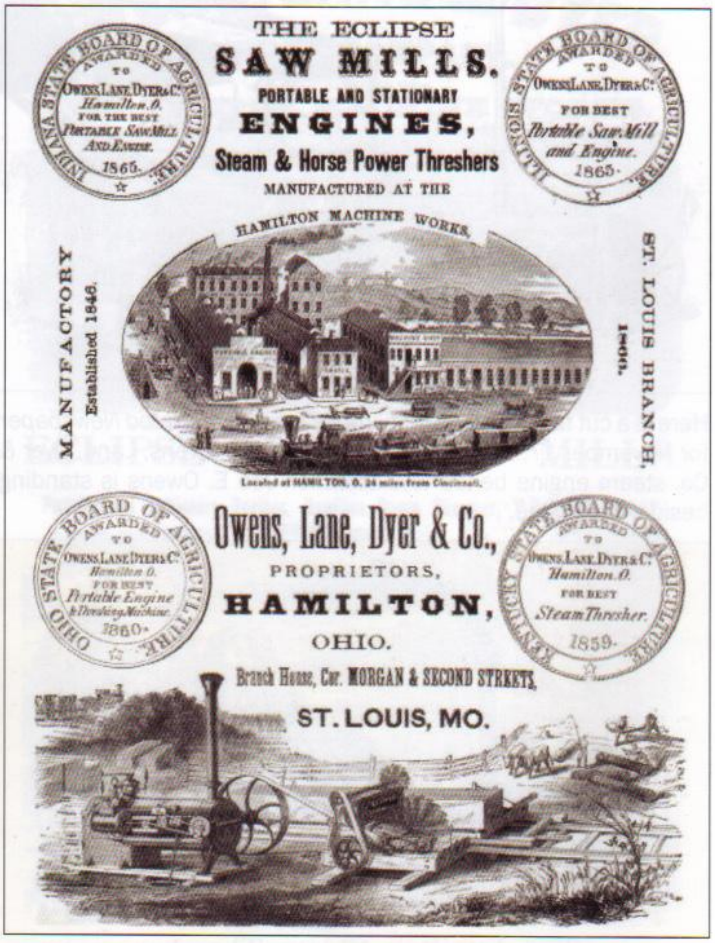
Hamilton Machinery in Operation.

According to several Hamilton histories, the Hamilton Agricultural Works, also known as the Eclipse Machine Works, built thousands of engines. Owens, Lane, Dyer & Co. advertised skid engines for sawmills, portable engines for threshers, and stationary engines for permanent installation. Courtesy George C. Cummins Collection of the Lane Public Library of Hamilton, Ohio



Descriptions surround this advertisement for Owens, Lane, Dyer & Co. in the city directory for 1865. The same cut appeared on page 403 in *Frank Leslie's Illustrated Newspaper* for November 17, 1860.

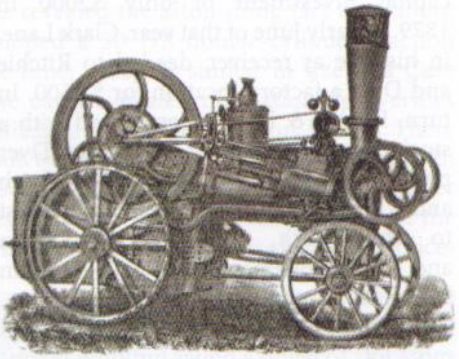
As we have known for some time, John C. Hooven had been building threshers and engines since 1876 in Rossville, which lies opposite Hamilton on the west side of the Great Miami River. Today, Rossville is part of Hamilton. The Hooven engines were assembled from boilers and parts made elsewhere. Hooven's engine line was called Monarch, a trade name not to be confused with the Monarch road rollers produced in Groton, New York. With his father and brother, John C. Hooven had begun business as Hooven & Sons. When the father and brother (Enoch) retired in 1876 and 1878 respectively, the firm became known as John C. Hooven. Other manifestations of the company were to come when Job E. Owens and George Adam Rentschler joined Hooven to create the new enterprise of Hooven, Owens, Rentschler & Co. In late November of 1880, Clark Lane, acting as receiver, deeded to Job E. Owens the former Owens, Lane & Dyer factory; in turn, Owens formed Hooven, Owens, Rentschler & Co., which assumed control of Owens, Lane & Dyer's Eclipse line of machinery (not connected to Frick's Eclipse line). While the Hooven firm produced portable engines, traction engines, and threshers, the former Owens, Lane & Dyer machines were also being built and sold. Perhaps surprisingly, the manufacturer became known as the Monarch and Eclipse Machine Works. Job Owens' son Joe became a stockholder. Retaining the Owens name, the reorganized company was renamed the Hooven, Owens & Rentschler Co. Very soon after Job Owens turned over his interests in the newly formed company to his son, Job tragically and for unknown reasons committed suicide in a fashion similar to that of his old partner, E. G. Dyer, five years earlier.



Page 139 in the *Gazetteer of the Manufactures and Manufacturing Towns of the United States* (New York, J. M. Bradstreet & Son, 1866) carried this advertisement for Owens, Lane, Dyer & Co.

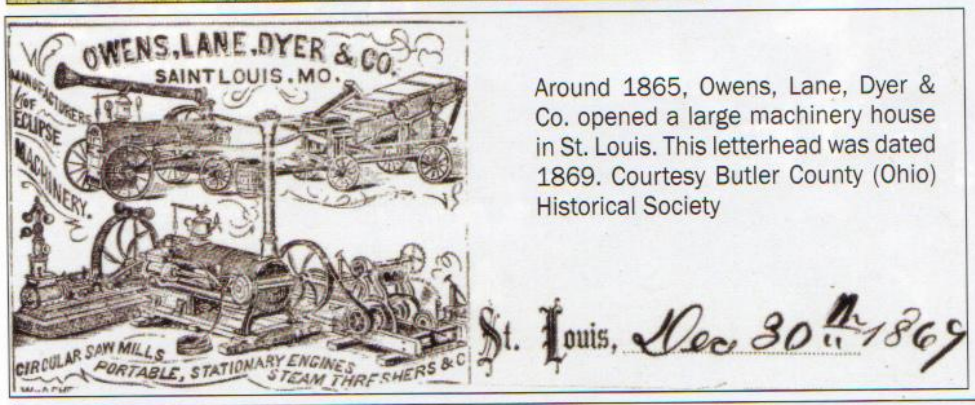
The new firm moved into the old Owens, Lane, and Dyer plant. An advertisement in the *Ohio Farmer* for March 4, 1882, reported that the Monarch traction engine took the first premium at a fair in St. Louis and at the Atlanta Cotton Exposition. In that same year, the company began to focus on the building of Corliss engines. In 1901, the manufacturer's name changed again to the Hooven, Owens, Rentschler Co. The firm was also known as the Hamilton Corliss Engine Works. In 1916, John C. Hooven died. In 1928, Rentschler merged his firm with the well-known Niles Tool Works to form the equally well-known General Machinery Corporation.

The fall of the old Owens, Lane & Dyer Co. was seen as a business opportunity for two Hamilton residents, William Ritchie and William Dyer. For many years, Ritchie, who, like John C. Hooven and Enoch Hooven, was an honored Civil War veteran, worked as superintendent for Owens, Lane & Dyer. At the time of dissolution of that company, he was a board member as well. Dyer, in his twenties, was the son of E. G. Dyer and a machinist at the failed company. The two wanted to continue,

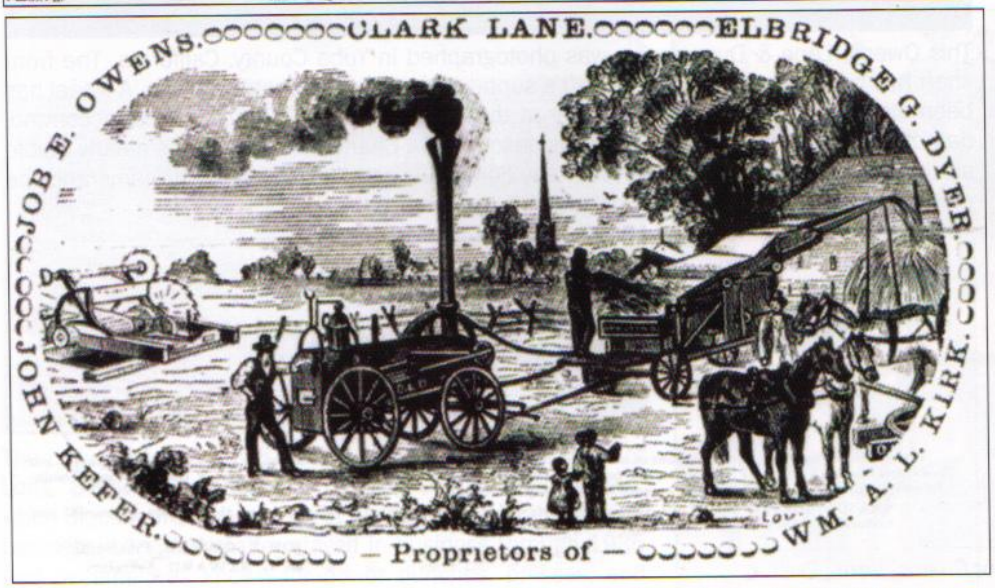


Even though the first traction engines built by Owens, Lane, and Dyer were copied from the Aveling & Porter engine that George W. Dick of Ross (then named Venice), Ohio, brought by canal to Hamilton in 1872, they boast many distinctly non-Aveling features, including a tilted cylinder, a heavy flywheel, and an extra shaft in front of the smokebox. Despite its Rube Goldberg appearance, this engine won an award in 1874. Similar cuts of the Hamilton traction engine appeared in such publications as the *Pacific Rural Press* for January 30, 1875. In his *American Thresherman* articles that were collected under the title *Development of the Traction Engine in America*, Charles M. Giddings, who designed engines for Russell of Massillon, Ohio, described the design of the Owens, Lane & Dyer traction engine: "As the old original engine was a short stroke with a very long connecting rod, the crank shaft was at the fire box end of the boiler which made a very long coupled engine, and the traction power was carried to the wheels through a system of gears of the English type. It was up to this time supposed that it was necessary to have a counter shaft mounted on the smoke box end of the boiler and extending clear across so that a belt pulley would clear the boiler on one side, and the power was transmitted to this counter shaft with a V leather belt. This V belt came about as a solution of transmitting power across the street from the main machine shop of Owens, Lane & Dyer to a pattern shop. In order to overcome the damage from rain and sunshine, a narrow leather belt with V shape blocks built up of leather was devised and this belt was run in a grooved pulley and proved very satisfactory. This belt was made by Joseph Sharp of Cincinnati. This type of traction engine was finally abandoned and it was discovered that a belt pulley could be put on the other end of the crank shaft."

Dan Greger and Joyce Hoffmaster own this portable engine built by Owens, Lane, and Dyer.



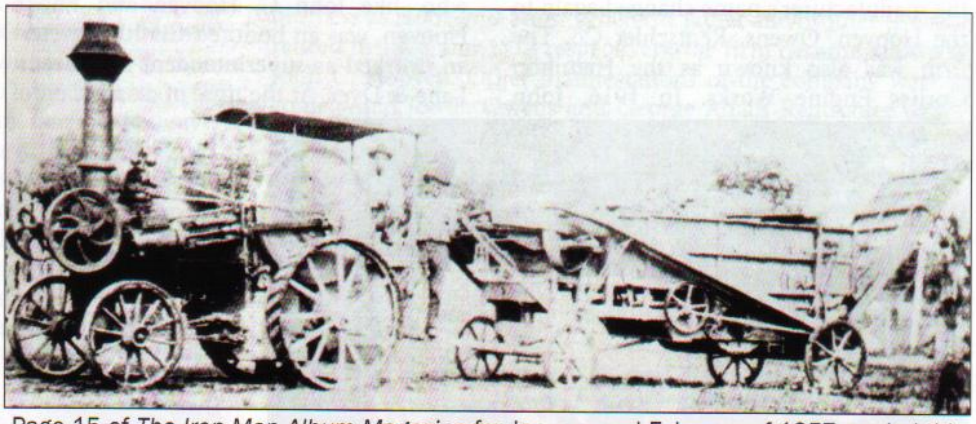
Around 1865, Owens, Lane, Dyer & Co. opened a large machinery house in St. Louis. This letterhead was dated 1869. Courtesy Butler County (Ohio) Historical Society



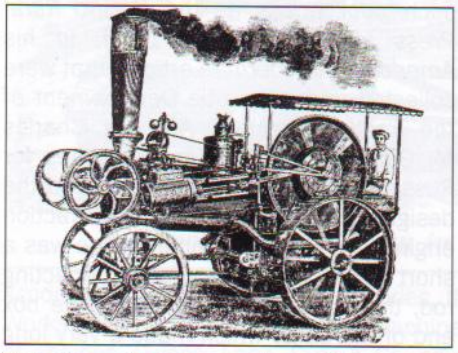
This advertisement names the proprietors of the Hamilton Agricultural Works: Job E. Owens, Clark Lane, Elbridge G. Dyer, John Kefer, and William A. L. Kirk. Courtesy George C. Cummins Collection of the Lane Public Library of Hamilton, Ohio

service, and expand the Owens, Lane, and Dyer engine and sawmill product line. Times were hard and Stephen Cone's Hamilton history states they started with a capital investment of only $2000 in 1879. In early June of that year, Clark Lane, in his role as receiver, deeded to Ritchie and Dyer a factory location for $1,500. In turn, Ritchie & Dyer incorporated with a stock offering of $50,000. Ritchie and Dyer purchased property at the corner of 4th and Vine and began their operation. Just to the south, Archibald Davidson and Frank Doellman (whose last name in historical documents is spelled four ways, including Duellman) purchased several more lots to begin a boiler building manufactory. A business relationship between Davidson & Doellman and Ritchie & Dyer is assumed but has not been verified. Davidson had been superintendent of the Owens, Lane, and Dyer boiler shop.

Ritchie and Dyer company information is quite limited. No catalogs are known to exist. No engines have ever been located. Several trade cards are in our possession, and a couple of period newspaper articles were located. It appears that Ritchie and Dyer initially continued manufacture of a traction engine very similar to the left-sided slant-cylinder design of Owens, Lane, and Dyer. Ritchie and Dyer placed advertisements in 1880s Hamilton city directories that stated they also built tram engines. These probably small machines were designed for rail use in factories and for above-ground transport in the mining industry. The manufacturing output and the general business success of Ritchie and Dyer will never be known. Several period references were located stating employment of twenty-five workers to eighty. Ritchie and Dyer faced immense competition from better-known companies during their years of

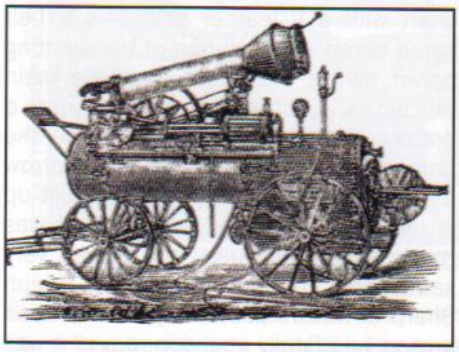


Page 15 of *The Iron-Men Album Magazine* for January and February of 1957 carried this photograph from 1888. The engine was a 10 HP Hamilton, and the photograph was taken near Freeburg, Illinois, on the farm of the rig's owner, Phillip Herman, who is seen standing on the engine. Behind him is Wilford Virgin.

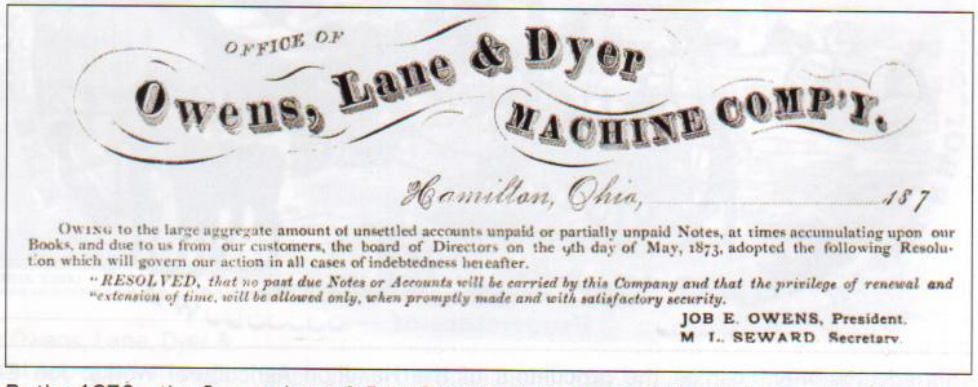


This view of an Owens, Lane & Dyer traction engine clearly exhibits the features that Charles M. Giddings described. Perhaps the "belt with V shape blocks" has been removed so that the front shaft does not have to spin while the engine is being driven along a roadway. Courtesy Gary Yaeger

This Owens, Lane & Dyer engine was photographed in Yuba County, California. The front shaft has been removed, but the shaft's supporting brackets are still in place. A wheel has been attached to the side of the boiler at the smokebox end. The groove that accommodated the "belt with V shape blocks," as described by Charles M. Giddings, is clearly visible around the face of the flywheel. Courtesy Forest Service through Keiko Williams and the publishing group of the Pacific Southwest Research Station



Hooven & Sons built this portable engine.



OFFICE OF

Owens, Lane & Dyer MACHINE COMP'Y.

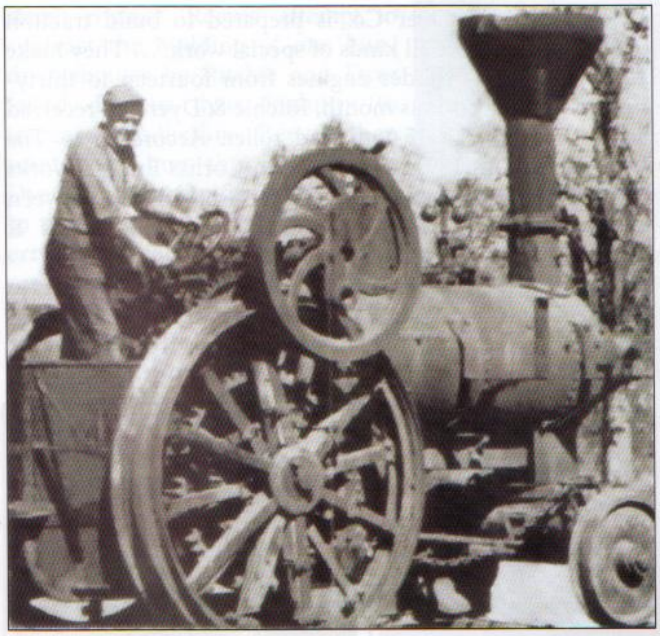
Hamilton, Ohio, ... 187

OWING to the large aggregate amount of unsettled accounts unpaid or partially unpaid Notes, at times accumulating upon our Books, and due to us from our customers, the board of Directors on the 9th day of May, 1873, adopted the following Resolution which will govern our action in all cases of indebtedness hereafter.

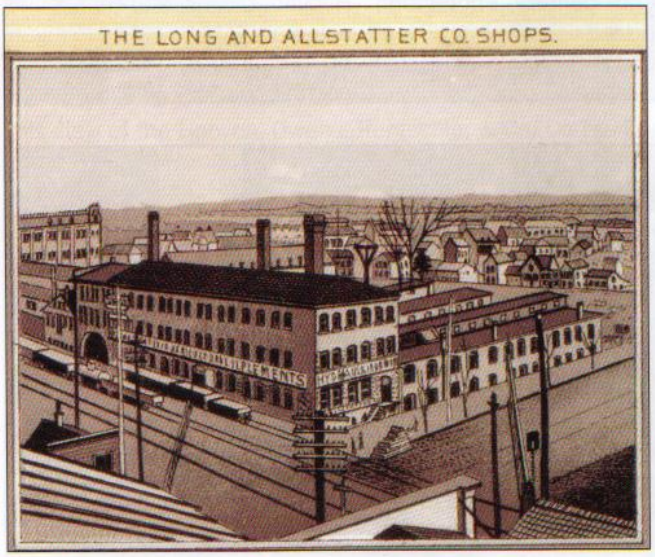
"*RESOLVED, that no past due Notes or Accounts will be carried by this Company and that the privilege of renewal and extension of time, will be allowed only, when promptly made and with satisfactory security.*

JOB E. OWENS, President.
M. L. SEWARD Secretary.

By the 1870s, the Owens, Lane & Dyer firm was in financial difficulty. Co-founder Clark Lane returned to Hamilton to act as receiver for the struggling company.



Owens, Lane, and Dyer built this engine, which appeared on the cover of *The Iron-Men Album Magazine* for September and October of 1951. The platform has the appearance of a British manstand because it was copied from George W. Dick's Aveling & Porter engine, imported from England in 1872. Clark Lane mentioned the English engine in his memoir. It is quite possible that this engine is the same one seen in the photograph from Yuba County. Both have retained the mounting brackets for the front shaft, and both engines and their boilers are the same size. (For more about Dick's Aveling & Porter engine and a peculiar use to which it was put, see Robert T. Rhode's article entitled "An Engine and an Epidemic" in *Engineers and Engines Magazine,* Vol. 43, No. 6, 1998, pages 38-43.)



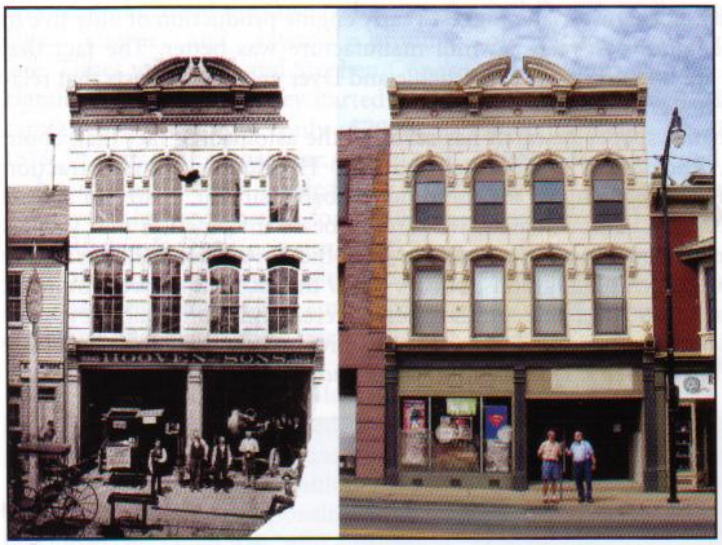
The city directory for 1861 and 1862 states that the firm of Long, Black & Alstatter was building steam engines, and, when Black retired around 1871, he started a portable engine business. Long & Alstatter stayed in business through 1935 and became well known for power punches, presses, and shears. As the company produced agricultural implements in the nineteenth century, its engines probably were intended for threshers and sawmills. Courtesy Robert T. Rhode

activity. Local historians suggest yearly engine production of only five to fifty engines per year. Sawmill manufacture was better. The fact that there are no known existing Ritchie and Dyer engines suggests that relatively few engines were produced.

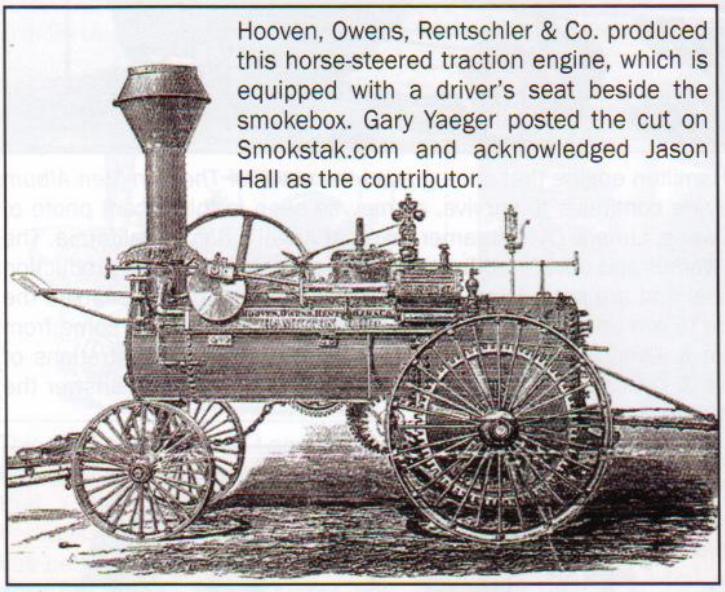
Our newspaper research has revealed the astonishing fact that, about 1890, Ritchie and Dyer developed a 30 HP double-cylinder traction engine. A huge engine for the time, probably similar in size to a Case 32/110 HP! Unfortunately, we cannot locate information that verifies shipments to Maxwell, California, and another to Atkinson, Illinois. There are no known photographs, but we know that at least six were built. In the early 1890s, Ritchie and Dyer engineered and built double-cylinder simple and compound engines in sizes preferred by threshermen of the era. On October 9, 1891, Hamilton's *Journal News* carried this announce-

The Hamilton engine that once graced the cover of *The Iron-Men Album Magazine* continues to survive, as may be seen in this recent photo of the Owens, Lane & Dyer steamer taken at Angel's Camp, California. The front wheels and other modifications were the result of a post-production remodel and are not original to the engine. The alterations enabled the engine to run on rails. Could the parts for the remodel have come from Ritchie & Dyer, which advertised tram engines? As no illustrations of Ritchie & Dyer tram engines have come to light, we cannot answer the question.

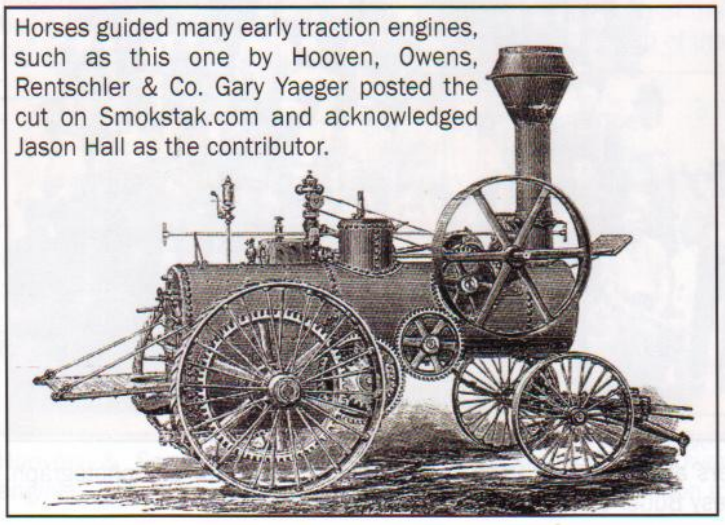
Workers at the Owens, Lane & Dyer factory posed for this photograph. Courtesy Butler County (Ohio) Historical Society



In the view at the left, John C. Hooven poses proudly before a thresher and a portable steam engine standing in the entries of his factory on the west side of the Great Miami River in Rossville, which even then was considered part of Hamilton. Neal Simpson photographed the view at the right, which features his co-authors, Robert T. Rhode and Mark Ohlde, standing where John C. Hooven once stood. Present-day photograph courtesy Neal Simpson



Hooven, Owens, Rentschler & Co. produced this horse-steered traction engine, which is equipped with a driver's seat beside the smokebox. Gary Yaeger posted the cut on Smokstak.com and acknowledged Jason Hall as the contributor.



Horses guided many early traction engines, such as this one by Hooven, Owens, Rentschler & Co. Gary Yaeger posted the cut on Smokstak.com and acknowledged Jason Hall as the contributor.

ment: "The Ritchie & Dyer Co. is prepared to build traction engines of all varieties for all kinds of special work. … They make a specialty of double cylinder engines from fourteen to thirty-horse power." In the previous month, Ritchie & Dyer had received an order to construct a 15-ton road roller. According to *The American Engineer*, in 1891, the Hamilton Corliss Engine Works was one of the largest engine works in the world. With between four hundred and five hundred workers, Hooven, Owens & Rentschler dwarfed its neighbor, Ritchie & Dyer!

About 1894, the Ritchie & Dyer engines were known to Marshall Reeves from Columbus, Indiana. Reeves wanted to expand his Reeves & Co. product line to include a traction engine. He was attracted to the double-cylinder concept for use in farm

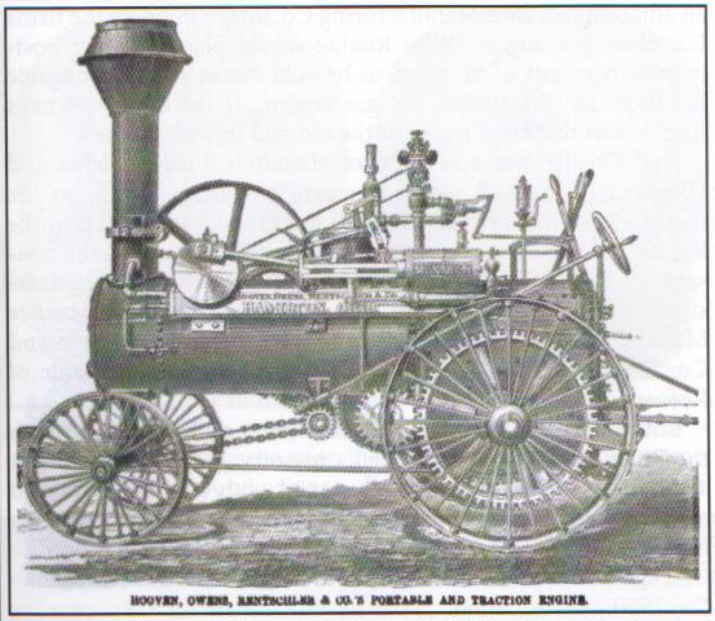
This portrait of John C. Hooven depicts an entrepreneur, an industrialist, and a philanthropist dressed as befits a gentleman in the latter portion of the nineteenth century. Photograph of portrait courtesy Neal Simpson

George Adam Rentschler, who was known by his middle name, became an iconic figure in Hamilton. He joined the Hooven and Owens families to form Hooven, Owens, and Rentschler, a company that swelled to gigantic proportions. Photograph of portrait courtesy Neal Simpson

At the right, Adam Rentschler rocks his chair back as he shares an afternoon with (standing) Fred Dilg, William Dingfelder, Charles E. Heiser, George P. Sohngen, (sitting) Charles Sohngen, and Henry Sohn. These citizens made names for themselves in various industries, enjoyed comfortable lifestyles, and lived in lavish homes.

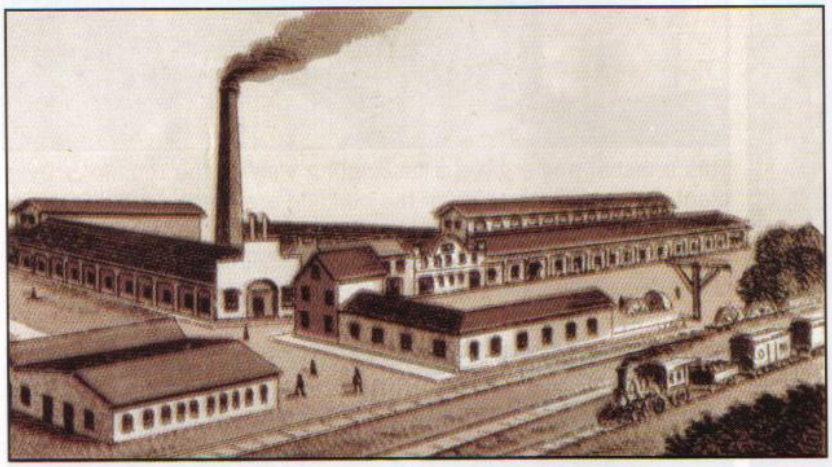
steam engines. Reeves' attempt to contract the building of one hundred engines by Ritchie and Dyer failed due to their inability to increase production. Reeves then wanted to buy the Ritchie and Dyer engine manufacturing rights. In the fall of 1895, Columbus property tax abatement issues were resolved by the city council, and the transaction was completed. Reeves engines would be manufactured in Columbus beginning in 1896. Surprisingly, on the eve of the sale, Hamilton newspapers were reporting a possible Reeves and Ritchie & Dyer merger with the company to be called Reeves and Ritchie and the engine manufacturing to remain in Hamilton. A large front-page advertisement appeared in a Hamilton newspaper within days of the impending sale showing a double-cylinder Ritchie & Dyer engine and

This portrait of William H. Dyer dates to his meteoric rise in the canning industry.

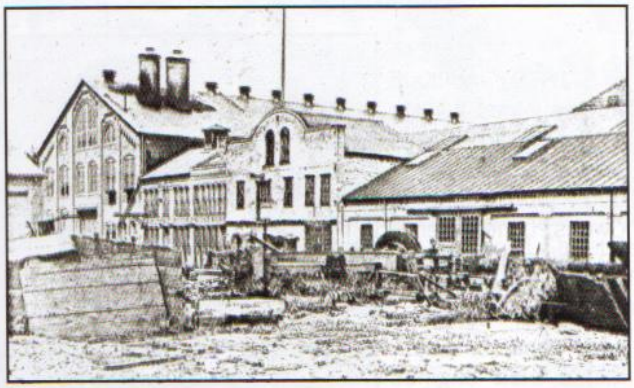


HOOVEN, OWENS, RENTSCHLER & CO.'S PORTABLE AND TRACTION ENGINE.

Between Pages 712 and 713 in *Knight's New Mechanical Dictionary* (1884) is this illustration of a Hooven, Owens, Rentschler & Co. traction engine equipped with a steering wheel and lacking a driver's seat beside the smokebox.

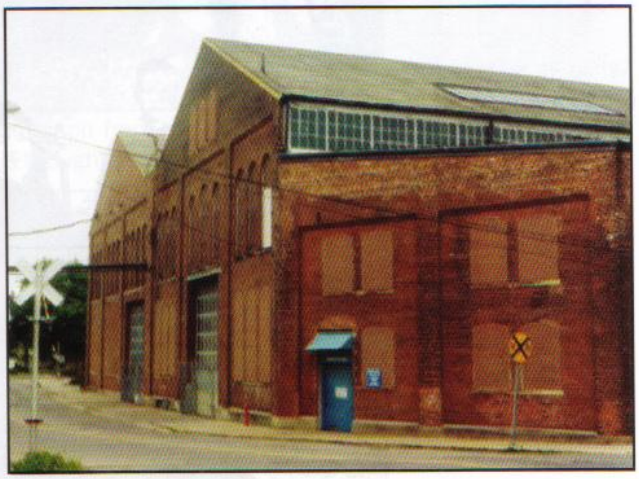


This view of the Hooven, Owens, Rentschler & Co. Corliss Engine Works was included in an undated booklet entitled *A Souvenir of Hamilton, Ohio*. Courtesy Robert T. Rhode



The 1913 flood took a toll on many businesses and homes in Hamilton. (For more information on the 1913 flood, see Robert T. Rhode's article entitled "Franklin Flood of 1913: Steam Engines in the Path of a Disaster and How a City Coped" in *Steam Traction*, Vol. 62., No. 1, 2007, pages 10-13.) Here is the Hooven, Owens, Rentschler & Co. Corliss Engine Works shortly after the devastation.

The Hooven, Owens, Rentschler & Co. plant kept expanding until it covered a vast area. Courtesy George C. Cummins Collection of the Lane Public Library of Hamilton, Ohio



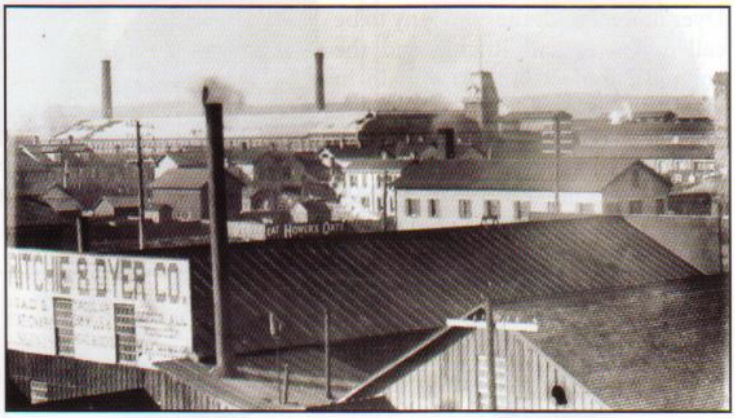
In 1996, Robert T. Rhode took this photograph of Hooven, Owens & Rentschler buildings.

an adjacent Advance Manufacturing Co. image showing the firm's Hamilton gas engine. Why Ritchie would place a rather costly advertisement of his soon-to-be-sold steam engine alongside his hope for the future, his gas engine, is debatable. Perhaps Ritchie was thinking "out with the old and in with the new."

Fred Doeller was a resident of Hamilton during Ritchie and Dyer's early years. A newspaper article written late in his life reported that he borrowed $38,000 in 1883 and invested it in the Ritchie & Dyer enterprise. Doeller subsequently became the treasurer of Ritchie and Dyer. Doeller would also become the treasurer of another William Ritchie venture, the Advance Manufacturing Co., and, later, the treasurer of Reeves and Co. Doeller died in Columbus, Indiana, soon after the sale of Reeves and Co. to Emerson–Brantingham in 1912.

Until now, William Dyer's life after his early involvement with the Ritchie & Dyer Co. has been a mystery. It appears that, after 1879, Dyer soon became disillusioned with his newly formed company. In the early 1880s, Dyer became affiliated with a food canning business in Hamilton. He subsequently removed to Chicago and kept his association with food canning, according to the 1900 census. About 1907, he established his own canning business in Vincennes, Indiana. Then, in early 1917, he relocated to Evansville, Indiana. With the onset of the First World War, his business was sensational with his products being pork and beans and catsup shipped to the boys "over there." After the war, several

Here is the Ritchie & Dyer factory. Courtesy George C. Cummins Collection of the Lane Public Library of Hamilton, Ohio



This unusual angle gives a fascinating view of the Ritchie & Dyer plant. Painted on the side of the building are these words: ROAD & STATIONARY ENGINES ... CIRCULAR SAWMILLS & HEAD BLOCKS ... REPAIR ALL KINDS OF MACHINERY ... Courtesy George C. Cummins Collection of the Lane Public Library of Hamilton, Ohio

In 1879, William Ritchie joined William H. Dyer in a business that, at first, continued production of Owens, Lane, Dyer & Co. engines and related equipment after the older company had ceased. Later, Richie built engines with an altogether different design. Courtesy Butler County (Ohio) Historical Society

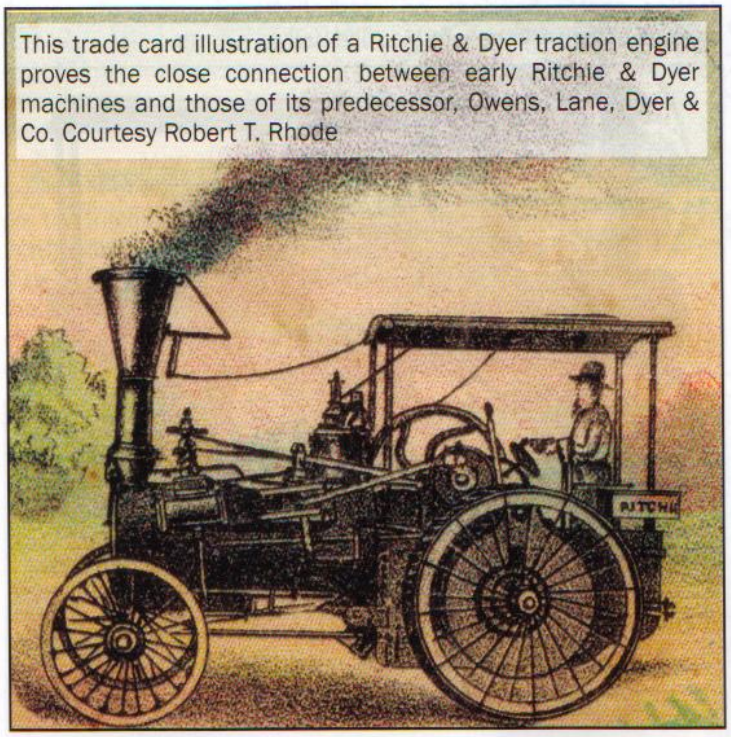
While it is tempting to consider that the Ritchie family posed for this photograph in the parlor of their home, which still stands, the picture probably was taken in a studio. William Ritchie is portrayed with spouse, Pattie Nifong Ritchie, and son, Oscar.

In 1887, Ritchie and Dyer Co. workers assembled for this photograph. Front row, left to right: John Meyer, unidentified, unidentified, Charles Ebel, Will Dowrey, William Ritchie, Oscar Ritchie, Fred Doeller, unidentified, Joseph Rodefer, unidentified. Middle row, left to right: first four on left unidentified, John Eisele, Charles Keiser, unidentified. Top row: unidentified, Ed Castator, Tom Dowrey (one of the founders of Empire Machine Co., which is to be discussed in detail later), three unidentified, Charles Robinson, John Fisher. Courtesy George C. Cummins Collection of the Lane Public Library of Hamilton, Ohio; identifications courtesy of the Butler County (Ohio) Historical Society

business decisions resulted in a catastrophic reversal of his fortune. In early 1922, he, like his father almost fifty years earlier, bought a revolver and ended his life.

Ritchie was appointed a commissioner to the 1893 Chicago World's Fair. There he saw a gas engine in operation, inspiring him to found the aforementioned Advance Manufacturing Co. that built the gas-powered engine called the Hamilton. Ritchie died in 1905, but his son Oliver continued the business until about 1950. Hamilton city directories suggest that gas engines were still being produced in the 1920s.

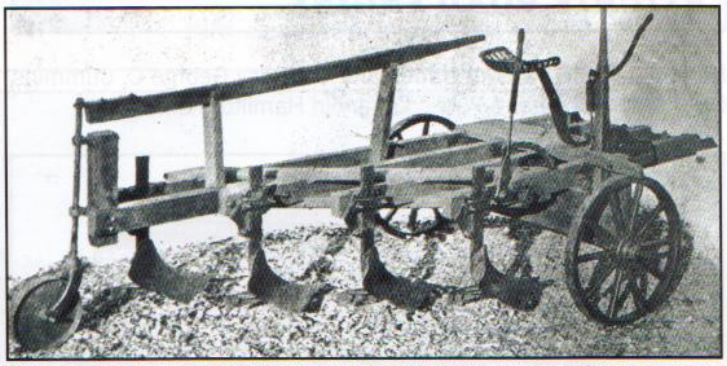
Here is a late Owens, Lane & Dyer or early Ritchie & Dyer traction engine. Courtesy Promont House Museum, Milford, Ohio



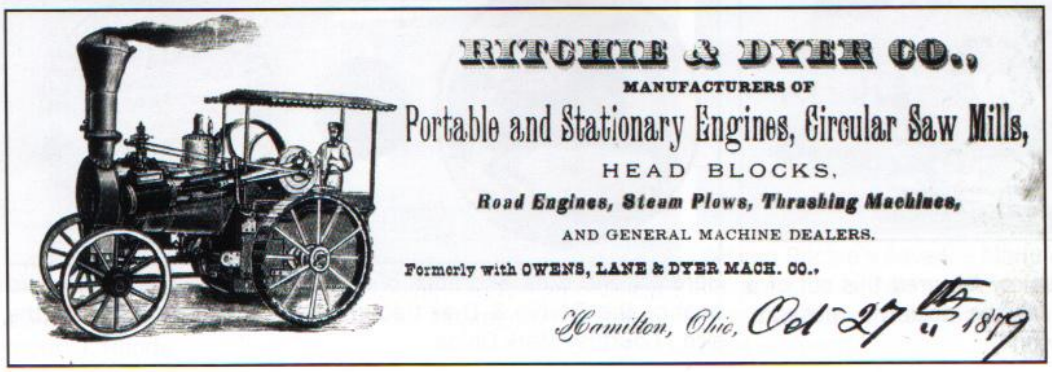
This trade card illustration of a Ritchie & Dyer traction engine proves the close connection between early Ritchie & Dyer machines and those of its predecessor, Owens, Lane, Dyer & Co. Courtesy Robert T. Rhode

Hand-held fans were prized on hot days before the advent of air conditioning. Here may be seen the front and back of a fan promoting Ritchie & Dyer road engines. Courtesy Mark Ohlde

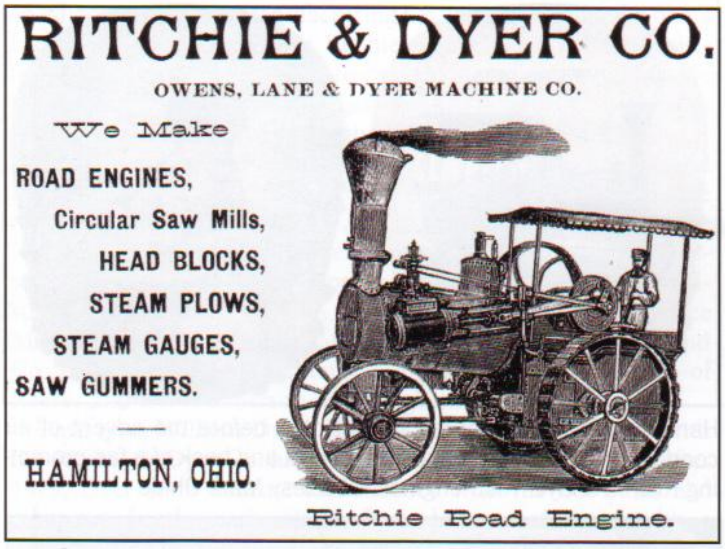
This Ritchie & Dyer engine was photographed on Broad Street in Middletown around 1890. Characteristic of the early Ritchie & Dyer engines, it is virtually an Owens, Lane & Dyer. Courtesy Middletown (Ohio) Historical Society



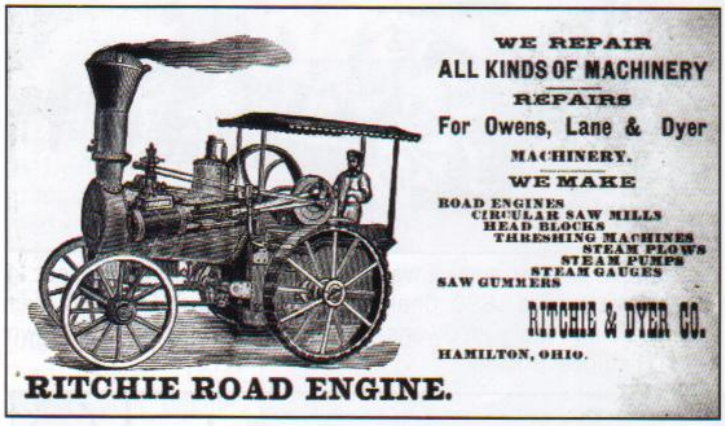
This photograph from the Cummins Collection of the Lane Public Library is thought to depict a plow produced by Ritchie & Dyer.



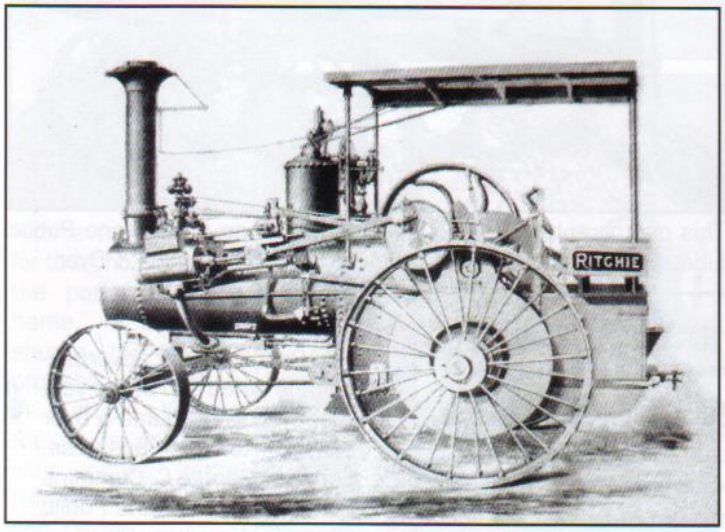
This Ritchie & Dyer advertisement is dated 1879, the very year that Owens, Lane & Dyer ceased to do business. Courtesy George C. Cummins Collection of the Lane Public Library of Hamilton, Ohio



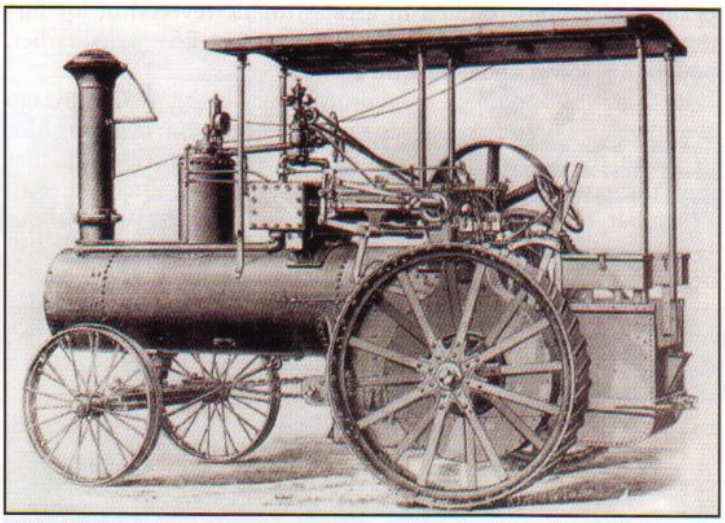
This advertisement from the *Twelfth Annual and Thirteenth Statistical Report of the Cincinnati Board of Trade and Transportation* for 1881 suggests that, originally, the Ritchie & Dyer firm considered itself to be the Owens, Lane & Dyer Machine Co.



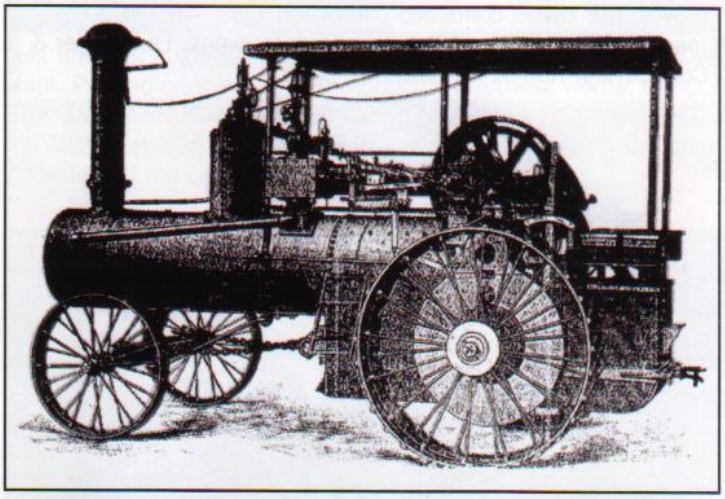
Here is a Ritchie & Dyer trade card. Courtesy George C. Cummins Collection of the Lane Public Library in Hamilton, Ohio



The Butler County (Ohio) Historical Society featured this cut of a Ritchie & Dyer engine in a display at the society's museum. Photograph of cut courtesy Neal Simpson



This Ritchie & Dyer machine represents a further step in the evolving design of such engines. Of special note is its resemblance to the Reeves engines. Writing in *The Iron-Men Album Magazine* for September and October of 1954, Marcus Leonard said, "In 1898 ... at Danville, Kansas ... I saw, near a shed, a rear mounted double Ritchie & Dyer with a broken crank shaft and the engine whipped to pieces. ... Neither Ritchie & Dyer nor Reeves engines were built with center bearings on crankshafts. The sight of the Ritchie & Dyer, whipped to pieces, remained with me and my reason for suggesting center bearings on crankshafts of cross compound engines." Courtesy the late Maurice Kelly



Here is yet another step in the ever-changing design of Ritchie and Dyer engines. This cut appeared in the *Hamilton Daily Democrat*.

Here are the front and back of a distinctively shaped trade card bearing the Ritchie & Dyer trademark. (The quarter indicates the size.) Courtesy Mark Ohlde

Empire Machine Co. (1892–1910) / Triumph Laundry Machine Co. (1910–1918) of Hamilton, Ohio

By Neal Simpson

It was a complete surprise for this resident of New Jersey to be invited by Dr. Bob Rhode to be a co-author along with Dr. Mark Ohlde on this article concerning the history of Hamilton steam traction engines. I am an avid amateur history buff with no connection to farming or steam. (But I do own a 1950 Ford 8N tractor!) Since I first logged onto the Internet in 1996, I have been teaching myself how to use online resources to research my genealogy. One branch of my family tree that I have been neglecting for a few years is the Davidson line, as I did not think that the Davidsons could be as interesting to research as some other branches. Boy, was

This cabinet photograph depicts a Ritchie & Dyer engine with a full canopy and a spark arrester for burning wood. The threshing machine and swinging stacker resemble products of the Springfield Engine and Thresher Company of Springfield, Ohio, but have not been positively identified. Courtesy Mark Ohlde

The origin of the unusual Ritchie & Dyer trademark has been lost with the passing of time. It may have represented a response to the horse trademark of the Huber Manufacturing Company of Marion, Ohio. If so, the Ritchie & Dyer depiction might be interpreted as meaning, "With our engines that win the race, we thumb our nose at your slow engines."

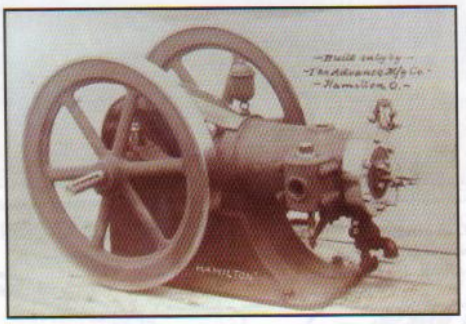
William Ritchie's house still stands. Photograph courtesy Robert T. Rhode

William Ritchie's Advance Manufacturing Co.'s factory building can yet be seen. It is not far from John C. Hooven's original building in Rossville, the part of Hamilton west of the river. Photograph courtesy Neal Simpson

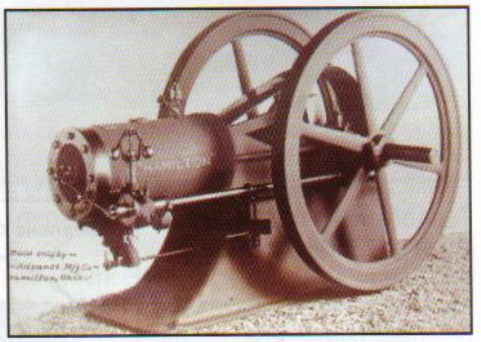
I about to be proven wrong!

One day in October 2012, I was sitting at a microfilm reader at a public library in Connecticut looking for the 1906 obituary of my second great grand uncle, James Davidson. The obituary stated that James had gotten severely ill while visiting his brother Archie Davidson in Hamilton, Ohio. He was being rushed back to Connecticut but got only as far as his daughter's home in Bayonne, New Jersey, where he passed away. All of this was new information for me, and it was sad to learn that James' death was so untimely... . But who was this "Archie Davidson"??? Looking up Archie on some well-known genealogy websites, I was able to locate a copy of his 1915 obituary and discovered to my amazement that he had founded a company called "Empire Machine" that built stationary and steam traction engines in Hamilton, Ohio! Then I found an advertisement from an 1898 Hamilton newspaper picturing an Empire steam traction engine! This really got me excited! Curiosity got the better of me. There had to be an expert on steam engines that could tell me if Archie Davidson really built steam engines in Hamilton. I Googled "steam engine histo-

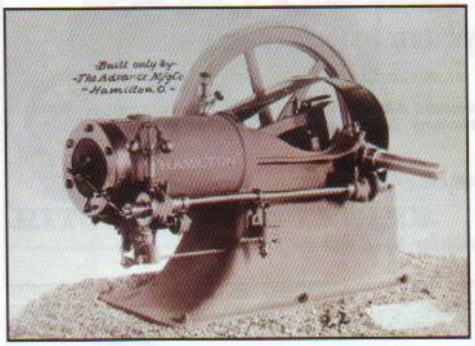
A Hamilton gasoline engine, built by the Advance Manufacturing Co., has enough power to run this thresher. Courtesy George C. Cummins Collection of the Lane Public Library of Hamilton, Ohio



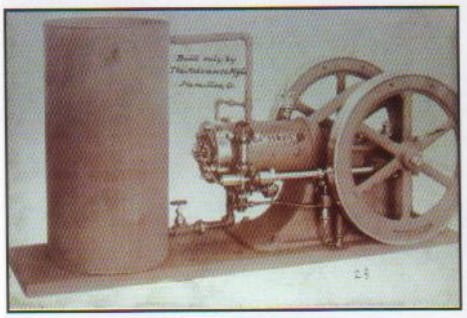
William Ritchie founded Advance Manufacturing Co. to build the Hamilton line of gasoline engines including this model. William's son, Oscar, joined his father in the enterprise. Advertising photo courtesy Butler County (Ohio) Historical Society; photograph of advertising photo courtesy Mark Ohlde



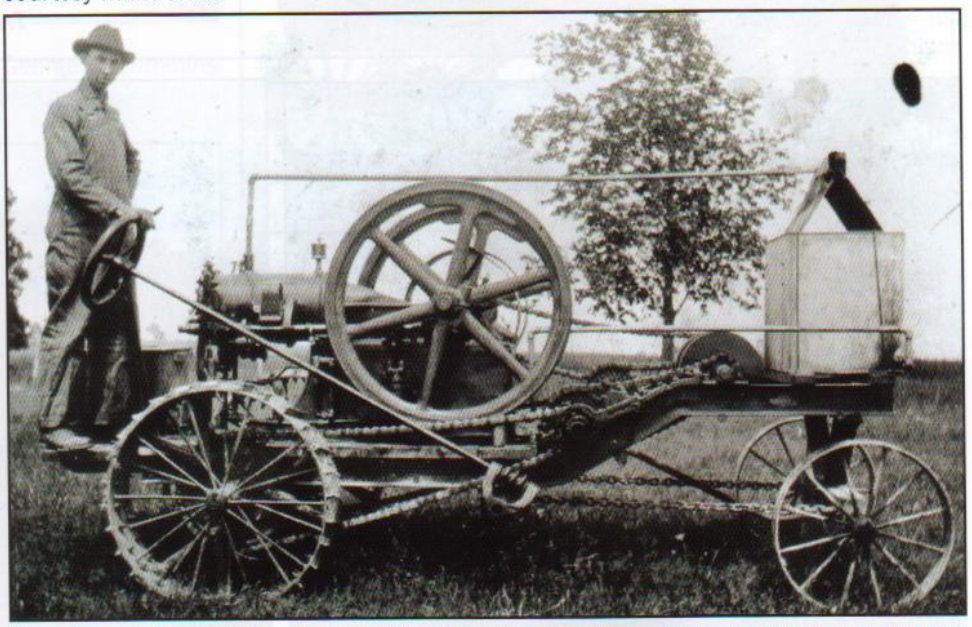
The forward-looking William Ritchie envisioned an increasing demand for gasoline engines. Advertising photo courtesy Butler County (Ohio) Historical Society; photograph of advertising photo courtesy Mark Ohlde



The Advance Manufacturing Co. of Hamilton, Ohio, produced this gasoline engine. Advertising photo courtesy Butler County (Ohio) Historical Society; photograph of advertising photo courtesy Mark Ohlde

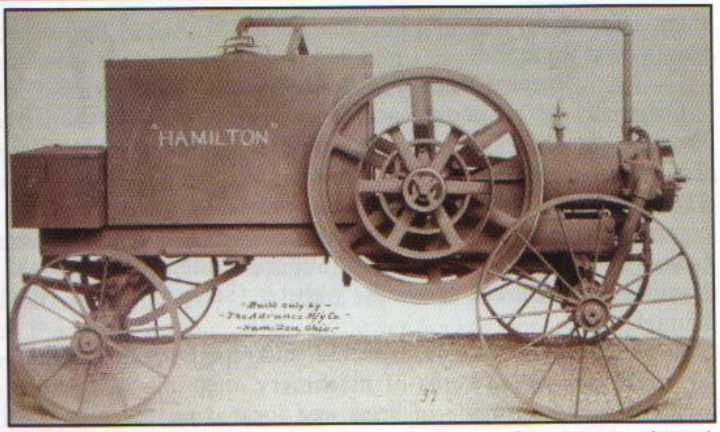


Here is an image of the Hamilton gasoline engine with attached water tank. Advertising photo courtesy Butler County (Ohio) Historical Society; photograph of advertising photo courtesy Mark Ohlde

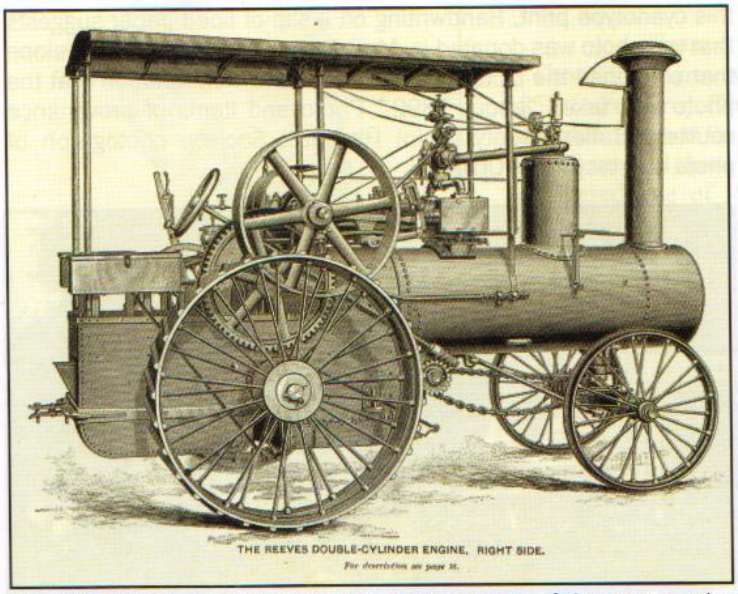


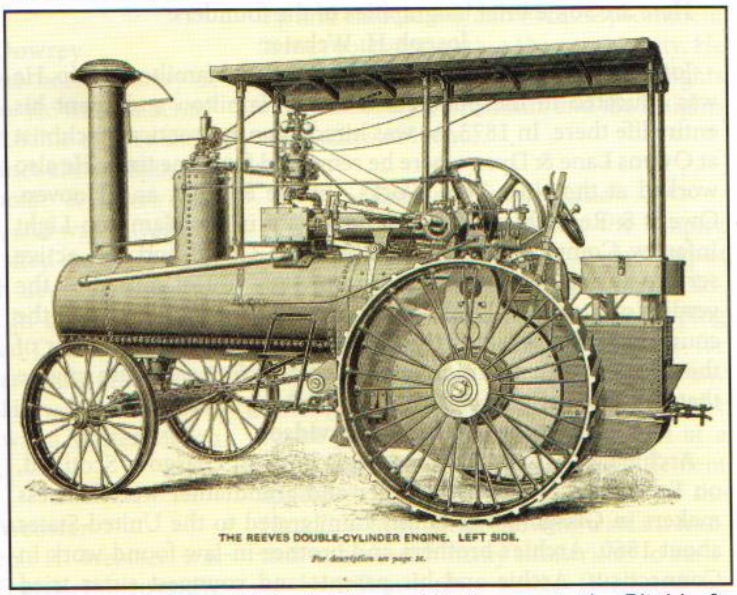
Here is an Advance Manufacturing Co. Hamilton gasoline engine designed as a tractor. The back of a postcard featuring this same photograph identifies the scene as John Becker's farm near Seven Mile, Ohio. The postcard is in the collection of the Butler County (Ohio) Historical Society. Photograph courtesy George C. Cummins Collection of the Lane Public Library of Hamilton, Ohio

rian" and Dr. Robert Rhode's name appeared. Tempted, I emailed Dr. Rhode with my questions, hoping for the best. To my surprise, I received a quick friendly reply from Bob stating, "Empire did not build steam engines"! Confused, I then sent Bob a second email with an attachment of the 1898 Empire traction engine advertisement. Bob could not have been more excited! The traction engine in the advertisement matched the image of a "mystery" traction engine that appeared in a photograph of the collection of the Middletown Ohio Historical Society. No one could identify it, but its design showed hints of a Hamilton pedigree—but with a unique wheel design. Apparently, a complete novice (me!) had found an unknown steam engine manufacturer with connections to Owens, Lane & Dyer and Ritchie & Dyer to boot! That's when Bob extended the invitation to join him and Mark to search the dusty archives of Butler County, Ohio. Luckily for Bob and Mark, I have a technical background, love the history of technology, and was available to visit Hamilton to research the Empire Machine Co. and the Davidson family. I hope our collaboration was as enjoyable for

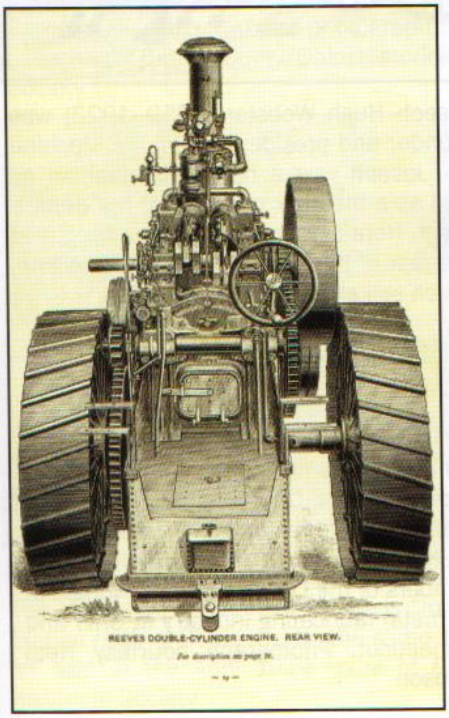


This product of the Advance Manufacturing Co. was equipped with trucks, or wheels. Advertising photo courtesy Butler County (Ohio) Historical Society; photograph of advertising photo courtesy Mark Ohlde

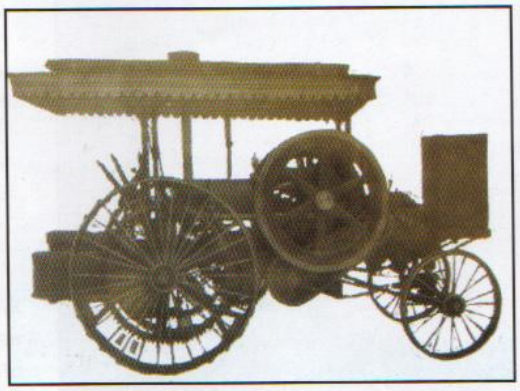




The 1895 Reeves catalog presented these cuts of the company's newly minted engine, which clearly owed its lineage to the Ritchie & Dyer line. Courtesy Mark Ohlde



Left: This rear view of the Reeves engine appeared in the 1895 catalog, shortly after Reeves acquired the Ritchie & Dyer engine business. Courtesy Mark Ohlde



This Hamilton tractor, produced by the Advance Manufacturing Co., offered a canopy. The tractor might have been built around 1904. Print used to form a copper cut courtesy Butler County (Ohio) Historical Society; photograph of print courtesy Mark Ohlde

Fred Doeller exhibited considerable talent for budgets and served as treasurer of several firms. When Reeves of Columbus, Indiana, bought Ritchie & Dyer's engine line, Doeller moved from Hamilton to Columbus to work for Reeves. Doeller's portrait appeared in the 1903 Reeves catalog. Courtesy Mark Ohlde

them as it was for me.
Here's what we found:

Empire Machine Co., Hamilton, Ohio

Originally to be known as Dowrey, Webster and Co., The Empire Machine Co. was incorporated in the state capital, Columbus, Ohio, on December 23, 1892, with a capital of $12,000, divided into shares of $100 each. The founders of the company were Joseph H. Webster (President), Thomas Dowrey (sometimes spelled Dowery) (Superintendent), Archibald Davidson (Treasurer), James R. Webster (Secretary), and Alex Hunter.

Organized to manufacture, deal in, and repair engines, boilers, sawmills, and other kinds of machinery, their plant was constructed new and made of brick and located on the northeast corner of Walnut Street and the Cincinnati, Hamilton & Dayton railway in Hamilton. The company was open for business on or about March 27, 1893, and had the capacity to employ about twenty men.

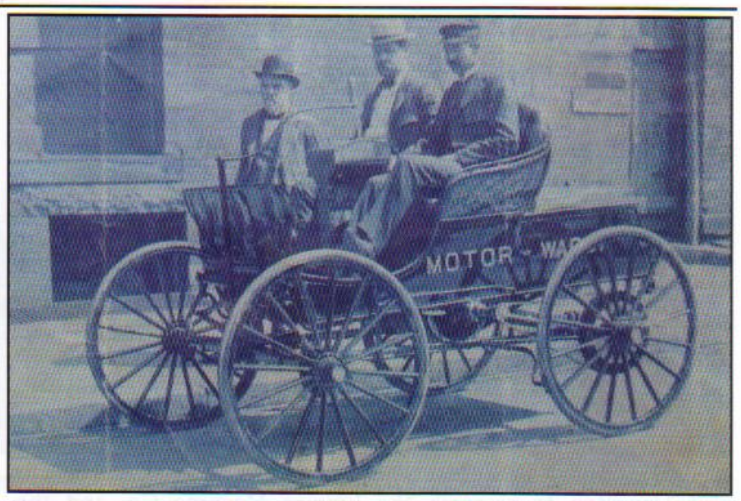
Here are some brief biographies of the founders:

Joseph H. Webster

Joseph Webster was born April 13, 1859, in Hamilton, Ohio. He was educated in the public schools of Hamilton and spent his entire life there. In 1873, he was hired as an apprentice machinist at Owens Lane & Dyer, where he remained for some time. He also worked at the Niles Tool Works, Ritchie & Dyer, and Hooven, Owens & Rentschler. He was a lieutenant in the Hamilton Light Infantry Company of the Ohio National Guard and saw active service during the Cincinnati Riot of 1884 (a riot caused by the verdict of a murder trial, where over fifty people died and the courthouse was set on fire and destroyed). He was a member of the fire department and operated the old *Neptune* steam engine that still exists at the fire house on Pershing Avenue.

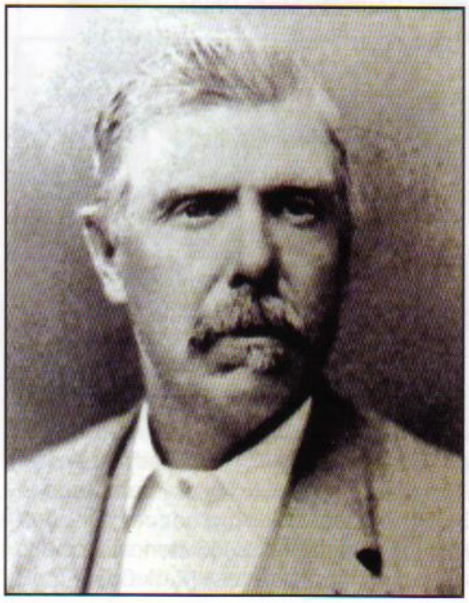
Archibald Davidson

Archibald "Archie" Davidson was born in Glasgow, Scotland, on February 12, 1839. His father and grandfather were harness makers in Glasgow. The family immigrated to the United States about 1860. Archie's brothers and brother-in-law found work in Connecticut. Archie and his parents and youngest sister tried Pittsburgh, Pennsylvania, where Archie began to learn the trade of making boilers. Sometime



Here is a rare view of a motor wagon designed by William and Oscar Ritchie. William is to the left and Oscar is second from the left in this cyanotype print. Handwriting on a slip of lined paper suggests that the photo was donated by Mrs. Oscar Ritchie, and an envelope that contained the picture bears the handwritten notation that the photo was taken "about 1892." Photo and items of provenance courtesy Butler County (Ohio) Historical Society; photograph of photo courtesy Mark Ohlde

Alexander Hunter (1849–1915) was a shareholder in Empire Machine Co. and a well-known Hamilton undertaker. Alex helped Archie Davidson take control of Empire Machine in 1901.



Joseph Hugh Webster (1859–1923) was founder and president of Empire Machine Co. Joseph was a native Hamiltonian as well as a member of the local fire department. Here he is pictured at the far left at the rear of the *Neptune* steam fire engine, which still exists in Hamilton, Ohio.

Archibald "Archie" Davidson (1839–1915) was co-founder and eventual president of Empire Machine Co. The son of a Glasgow, Scotland, harness maker, Archie and his family immigrated to the USA about 1860. Members of the Davidson family worked in the metal fabricating industry in Ohio and Connecticut. Photograph courtesy Neal Simpson

before August 1870, he was brought to Hamilton, Ohio, by Job E. Owens of the Owens, Lane & Dyer Co. Both Archie and his father, John Davidson, were employed at the "Thresher Factory" (as it was called in the 1870 census), and, in time, Archie was promoted to the position of superintendent of Owens, Lane & Dyer's boiler manufacturing department.

About the time of Job E. Owens' death, Archie decided to go into the business of making boilers himself with his partner Frank Doellman, forming the company of Davidson & Doellman about 1877. The Davidson & Doellman boiler works were located in Hamilton on Lowell between Heaton and Vine Streets adjacent to Ritchie & Dyer. When Frank Doellman decided to retire in June 1892, the firm of Davidson and Doellman was dissolved and the contents of the business were purchased by Ritchie & Dyer. Archie then went on to help form Empire Machine at the end of that year.

Archie was also involved with many real estate transactions over the years in the Butler County area. For a time, he owned a 222-acre farm in Hanover Township. (It was known as "The Old Symmes Place." The house caught fire from a defective flue and burned to the ground on April 19, 1901.) Part of the farm is now a section of the Twin Run Municipal Golf Course.

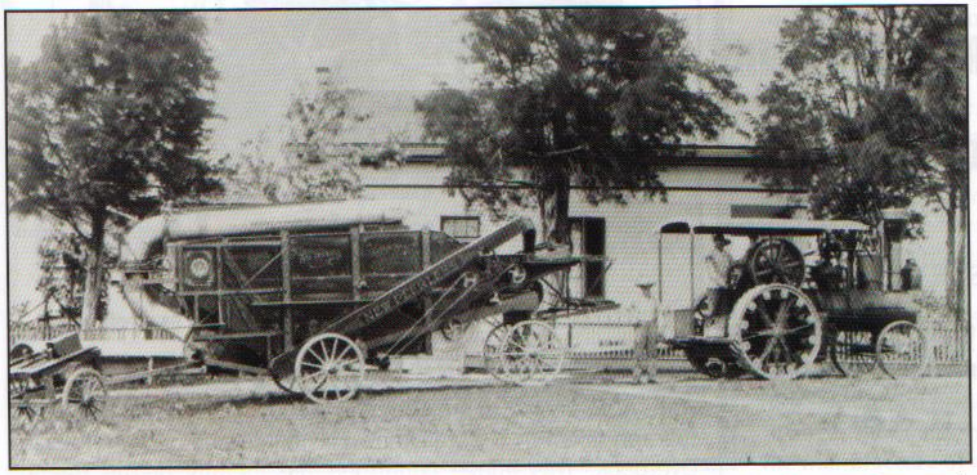
James Reed Webster (1843-1920) was a native of Hamilton, Ohio, and real estate entrepreneur. He was a co-founder and secretary of Empire Machine Co. He also owned a large rice plantation in Acadia Parrish, Louisiana. Cabinet photograph in collection of Butler County (Ohio) Historical Society

Thomas Dowrey

Thomas Dowrey was born January 5, 1850, in Pomeroy, Ohio. He was a machinist and foreman at the Ritchie & Dyer shop. He had worked there since about 1880, was considered one of Ritchie & Dyer's best and most faithful men, and was "...regarded as being part of the shop itself." Thomas was also affiliated with Lewis G. Gwinner and William R. Eiber. In 1887, they partnered to form Gwinner, Dowrey & Co., a Hamilton manufacturer of furniture casters and stove trucks. He was well known around Hamilton and was a Master Mason and a Knight Templer.

James R. Webster

James, brother of Joseph H. Webster, was born in Hamilton on February 8, 1843. He was a lawyer and heavily involved in business and real estate transactions in the Hamilton, Ohio, area. He attended Wesleyan University and was admitted to the bar in 1865. For the next twenty years at various times, he was involved with cotton plantations in Louisiana, farming in Iowa, and the timber industry in Tennessee. He was the owner of the 1,700-acre Webster rice plantation in Acadia Parish five miles southwest of Crowley, Louisiana. Due to the poor health of his father, he returned to Hamilton in 1887 and partnered in the real estate business with Potter, Parlan & Ehrman. He was a Mason and a member of the Mayflower Society of Cincinnati.



The Middletown Historical Society's "mystery" photograph shows a Geiser thresher and Empire engine. Could this be the same 16 HP Empire traction engine that was advertised for sale in the April 1919 issue of *Power Farming* magazine? Courtesy Middletown Historical Society

Alex Hunter

Alex was born in Hamilton, Ohio, on January 5, 1849. His first career was farming. From 1886 to about 1890, he had a brick manufacturing facility in Hamilton. In 1892, Alex decided to pursue undertaking and embalming and became prominent in his profession within the community. He was a member of the Masons, the Knights of Pythias, Royal Arcanum, and the Knights and Ladies of Honor.

Empire Product Line

Very little is known about the Empire product line. From articles in contemporary local newspapers, the firm was building oil-, water-, lard-, and paint-dipping tanks, as well as commercial boilers for buildings and smokestacks. The company also signed a contract in 1893 to supply the steam power for the machinery hall at a local fair. But, in 1898, an advertisement appeared in the March 23 edition of the *Hamilton Republican* showing a steam traction engine with many similarities to earlier Hamilton-built engines fabricated by Owens, Lane & Dyer and Ritchie & Dyer. The ad describes the business as "Manufacturers of Traction, Portable, and Stationary Engines, Boilers, Tanks, and Sheet Iron Work of every description. Machinery Repair a Specialty. We have several good Second-hand Traction Engines that we will sell at a bargain. Catalog sent on Application."

Some of the shareholders at Empire may have been interested in ending the business. There is an article in the October 4, 1898, *Hamilton Republican* stating that, within sixty days, a new ice plant organized by the Wm. Mild Ice Machine Co. was to occupy the site of the Empire Machine Co. with a capital of $50,000. The individuals who proposed this new business venture must have backed out of the deal, as Empire stayed in business at the Walnut Street location for many more years. A few months later, Empire Machine placed a curious classified advertisement in the January 1899 issue of *Ice and Refrigeration* magazine. The firm had for sale: "Five 3x10 inch single-acting ammonia gas compressors.

Capacity of 1,000 pounds ice making or one ton refrigerating. All new, and fine workmanship… ."

On February 14, 1901, Joe Webster announced that he was disposing of his holdings in Empire Machine and that he would give the company the first opportunity to purchase his twenty-nine shares of stock. With this announcement, Archie and Alex made their move… .

Two days later on February 16, 1901, two of the founders, Archie Davidson and Alex Hunter, and the current superintendent, George W. Rice, began actions in the Hamilton Common Pleas court against the Empire Machine Co. and the other stockholders—Joseph H. Webster, James R. Webster and Robert Neilan—for dissolution of the company. (The original superintendent and co-founder, Thomas Dowrey, might have no longer been part of the company at this time, as he was not mentioned.) The plaintiffs stated that "… the company owes a large sum of money, some of which is due and unpaid, and has no means to pay the same; and [it] cannot fulfill its contracts because of lack of funds. They allege that the business has been conducted at a loss and that its assets are being wasted and if continued it will work irreparable loss to the stockholders. Plaintiffs say the business [must] be wound up and hence they asked that the company's property be distributed, that a receiver be appointed and that the Corporation be dissolved."

On February 21, Joseph Webster agreed to sell his stock and retire.

On March 9, the lawsuit brought by Davidson, Hunter, and Rice against Empire Machine was dismissed. A few weeks later on April 5, an interesting advertisement for the Empire Machine Co. appeared on page 27 of the *Hamilton Republican* describing the Empire Machine Co. as the "Manufacturers of Balanced Valve Engines, Traction, Portable, and Stationary." The new president and treasurer was "A. Davidson," with Superintendent George W. Rice. Apparently a compromise was reached out of court, and Joseph R. Webster, James H. Webster, and Robert Neilan (who may have been the ten-year-old son of Hamilton Probate Judge John Neilan, the same judge who was presented with the receivership lawsuit) no longer appear in any references that can be found to the Empire Machine Co.

On February 28, 1902, a freak windstorm ripped off approximately fifty feet of the metal roof of the Empire Machine building causing minor damage. Many other roofs, chimneys, and trees were also damaged along with the rear stairs of the local opera house.

By the end of 1909, Empire Machine Co. no longer appeared to concentrate on the manufacture of steam engines and boilers. In January 1910, the firm changed its name to the Triumph Laundry Machinery Co. This name was adopted to conform to the Triumph line of laundry machinery that it now manufactured. Amazingly, there are some structural similarities to a steam engine boiler and a 1910-era industrial washing machine. (See the illustration on the next page.) The officers of the company at this time are Archie Davidson, president; P. L. Brockhart, vice president (Paul L. Brockhart was formerly a draftsman and engineer at the Advance Manufacturing Co., William Ritchie's gas engine company.), and Archie Davidson, Jr., secretary.

Archie was still president of Triumph Laundry Machine when he passed away at age 76 in September 1915. Archie's two sons Archie, Jr., and Arthur Clyde Davidson, both tried to keep the company in business after their father's death. Unfortunately due to mounting debt and lawsuits for unpaid bills, Archie's wife, Elizabeth Davidson, the inheritor of his estate, had to sell much personal property from 1916 thru 1918 to try to satisfy all of the claimants. This caused Triumph Laundry Machine to close its doors, and the Empire/Triumph building was sold on July 25, 1918, to Frank and Fred Graf, owners of the Graf Motor Car Co., to be used as the garage for their car dealership.

So what happened to everyone after the demise of Empire/Triumph?

All of the members of Archie Davidson's family left Hamilton, Ohio, by 1923.

Joseph Webster went to work for over twenty years at the Hooven, Owens & Rentschler Co. until he passed away on April

GEORGE W. RICE, Supt. A. DAVIDSON, Pres and Treas.

THE EMPIRE MACHINE CO.,

MANUFACTURERS OF

BALANCED VALVE ENGINES, TRACTION, PORTABLE, AND STATIONARY

—ALSO—

Boilers, Saw-Mills,

Head-Blocks, Shafting,

HANGERS, PULLEYS, ETC.

And give special and prompt attention to Repairing all kinds of Machinery, also Boiler Repairing and Sheet-Iron Work.

SHOPS, WALNUT ST. AND C., H. & D. R. R.

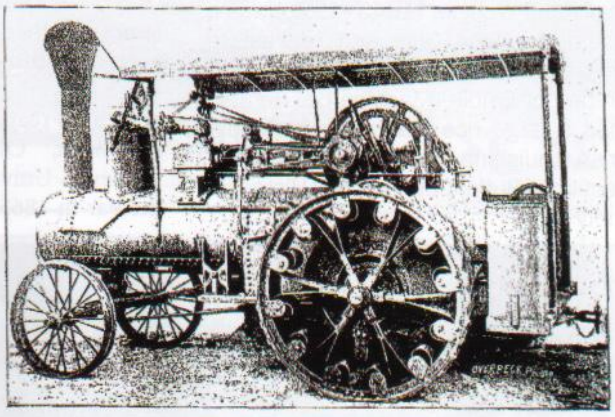
Telephone No. 12.

HAMILTON, OHIO.

This 1901 Empire Machine Co. advertisement confirms Archie Davidson's takeover of the business.

The Empire Machine Co.

Hamilton, Ohio, Butler Co.



—MANUFACTURERS OF—

Traction, Portable and Stationary Engines, Boilers, Tanks and Sheet Iron Work of every description. Machinery Repair a Specialty.

We have several good Second-hand Traction Engines that we will sell at a bargain. Catalogue sent on Application.

Shops, Walnut Street and C. H. & D. R. R. TELEPHONE 139-4

Here is an 1898 Empire Machine Co. advertisement with a photograph taken by the well-known Hamilton photographer Lucien Overpeck. This image confirmed the identity of the traction engine in the Middletown Historical Society photograph. Note the unique Y-shaped "leaf spring" spokes of the drive wheels. As of this writing, no known copies of an Empire catalog have surfaced.

27, 1923.

James Webster continued to run his rice plantation in Acadia Parish, Louisiana, and also helped organize the building of rice mills in Crowley, Louisiana. He passed away on August 6, 1920.

Thomas Dowrey became superintendent of Empire Machine again for a few months in 1902. He passed away on November 17, 1908.

Alex Hunter continued running his funeral home. He passed away on November 11, 1915.

Frank Doellman, Archie Davidson's partner from the Davidson and Doellman boiler works, passed away on August 16, 1916.

And what about the Empire traction engines??? At least one example survived to 1919. One of the last pieces of information found while researching this article was a classified advertisement from the April 1919 issue of *Power Farming* magazine. On page 58, H. H. Martin of Middletown, Ohio, has "FOR SALE—16 HP Empire traction engine. Price $300. Good as new." …

Acknowledgments

We thank Danny Lovell, library specialist at the W. Frank Steely Library of Northern Kentucky University, for his help in making documents available to us; we thank Brad Spurlock, library associate in reference services at the Lane Public Library, for his discerning selection of books and his extraordinary work with images pertaining to the history of Hamilton; we thank Kathy Creighton, executive director of the Butler County (Ohio) Historical Society, Marlene Carmack, researcher at the historical society, and Richard Scheid, volunteer at the historical society, for their expert assistance in finding a host of documents and illustrations; we thank Keiko Williams and the publishing group of the Pacific Southwest Research Station (USDA, Forest Service) for providing a scan of a historical photograph taken in Yuba County, California; we thank historian Phil McDonald for his insights into the Yuba County photo; we thank genealogist Nicole Rudd for her suggestions, all of which proved essential; we thank Roger Miller, historian, for his tireless efforts on our behalf; we thank Lee Hite of Cincinnati Triple Steam for his ongoing research into Hamilton's industrial history; we thank Jeff Bodnar for enabling us to explore the factory of the Hooven, Owens, Rentschler Co.; and we thank John H. White, Jr., the preeminent authority on early steam locomotives, as well as steam riverboats, for sharing his insights into Hamilton history. We extend special acknowledgments to Dick Haid and John Haid, direct descendants of John C. Hooven, for their keenly perceptive explanations of Hamilton history; to Dan Greger and Joyce Hoffmaster, who have kindly delved into their files to offer assistance not only this time but also over many years; and to Gary Yaeger, who generously shared his knowledge throughout the process of researching our story.

Contact steam historian Mark Ohlde at 5010 Jeffries Ct., Lawrence, KS 66047

Contact genealogist Neal Simpson at 1111 County Road 519, Frenchtown, NJ 08825; e-mail: simpneal@gmail.com

Contact steam historian Robert T. Rhode at 990 W. Lower Springboro Rd., Springboro, OH 45066; e-mail: case65@earthlink.net

Appendix

Page 8, Columns 1 and 2, in The Hamilton Guidon, Hamilton, Ohio, for April 8, 1875

THE HAMILTON ROAD ENGINE.

The public exhibition of the Traction Engine or Field and Road Locomotive (as it is called) marks a new area in mechanical enterprise in Hamilton.

It will be remembered that about 16 years ago threshing by steam instead of horses began to be talked about by some of the enterprising farmers of the west. Previous to this some attempts had been made with only partial success, or in so small and imperfect a way as to attract no notice or give no promise of satisfactory results.

Seeing the field in this direction open and inviting, the firm of Owens, Lane, Dyer & Co., who were then largely engaged in manufacturing Horse Power Threshers, entered upon the manufacture of Steam Threshing Engines, with experience and knowledge of the requirements, and full confidence in their ability to do it successfully.

It is hardly necessary, but only justice, to say of this firm that they were the successful pioneers in the introduction of machine manufacturing in Hamilton, and that they have never flagged in their efforts to keep our city in the lead of all others in the character, value and reputation of the various lines of work now so extensively carried on here; and it is only necessary to mention, as a well known fact, that they have abundantly fulfilled all they promised themselves or others in relation to Steam Threshing.

The Hamilton Portable Engines, Steam Threshers and other machinery from their works are now in extensive use in most of the Western States and Territories, and have a reputation certainly second to no others now manufactured. Stimulated by the success of this company, and following in their wake, other manufacturers have gone into the business, and now thousands of Steam Threshing Machines are in use, and where known, are almost entirely superseding the use of horses for the purpose of threshing in the great grain fields of the West.

Just now there is beginning to come a call for something more in the Steam Engine line. Traction Engines for use upon common roads have been desired, and to some extent experimented with; but until within a few years they have, in exceptional cases only, been made to perform duty satisfactorily in this way. In England they are now in use to some extent, and believed by some to be practical for various uses in this country.

With this prospect before them the new company led by the older members, with new life and ambition infused by the younger members, have designed, constructed and entered upon the manufacture of a Traction Engine, with the determination to make it completely successful and satisfactory to their customers as their Steam Threshers and other leading work has been.

On Tuesday, March 28th, the company made a *public test* and *trial* of the capabilities of one of the three engines of this class

In 1910, the Empire Machine Co. changed its name to the Triumph Laundry Machine Co. In this advertisement from 1913, you can see some similarities between the Triumph washing machine and a steam engine boiler!

they have just turned out of their works, and fully demonstrated that they are equal to what they have undertaken.

It is well known among the craft that it is comparatively an easy matter to apply propelling attachments to a Portable Engine, but to make one adapted for and equal to all the requirements of practical use, and to the conditions to which it will be subjected if put to general service in this country, is a different thing, and demands the mechanical skill and experience, and knowledge of the conditions and requirements that will lead to and secure the necessary strength and adaption to effective service. As the full power of the engine at a speed of 200 per minute, with full head of steam at over 100 pounds pressure, was applied to the drivers while they were revolving for a good foothold, it was pronounced a success under difficulties.

This was so fully satisfactory to all interested that the company, with the exception of one gentleman from Laporte, started back to town; he became so enamored with the engine that he preferred riding in upon it, probably wanting to get the "hang of the machine" a little before returning home, as he had determined to buy one for use in his extensive farming operations, for which we have since learned he has given his order to be filled out of the lot to come out the first of next month.

The company have recently remodeled their whole works, and are making adequate preparations to add these to their already varied operations, and will be prepared to manufacture them as extensively as the demand will require.

It is thus that we can with satisfaction record another triumph, and another stride in the march of mechanical improvement for Hamilton, and prophesy that through it a renewed interest and renewed activity will be directed and centered here.

With all our natural and acquired advantages, the citizens of Hamilton and of Butler County have reason to be proud of our reputation as a manufacturing city.

It is readily conceded by those well posted that in many leading lines of machinery of the kinds now coming into most general use and demand, no city west of the mountains, if indeed east of them, can equal us in the character, effective capacity and quality of the work turned out here. As the reputation and success of our manufacturing interest is a matter with which to some extent every interest in connected, and in which almost every citizen is in some way interested, we take pleasure in giving prominent notice of every advance in this direction, and are pleased to know that Hamilton will take the lead in showing what can be done in this new enterprise, as she has in so many others with eminent success.

We call especial attention at this time to the growing importance of our position as a centre of mechanical and manufacturing interests, and believe too much importance cannot be attached to it or too much encouragement be given to it.

With one of the finest agricultural regions in the world surrounding us, many are overlooking and do not fully appreciate the equally important, and we believe ultimately more satisfactory results from our products in the mechanical and manufacturing line in all its different parts. This involves an expense of material and skill in design and workmanship that in this country is not generally understood and taken into account.

A notice of this trial had brought to Hamilton a large number of prominent men from different sections of the country interested in the success of the enterprise. Before the trial, the company had their engine fired up and put through some of its "easy paces," and brought up two heavy log wagons and had them loaded with pig iron to the amount of 28,728 pounds, divided about equally upon each wagon.

Soon after 1 o'clock the visitors, with a large concourse of our own citizens, assembled at the works of the company to see the performance. Promptly on time the engine was fired up, and in charge of young Mr. Dyer, as engineer, brought round in position for attachment to the wagons in front of the shops.

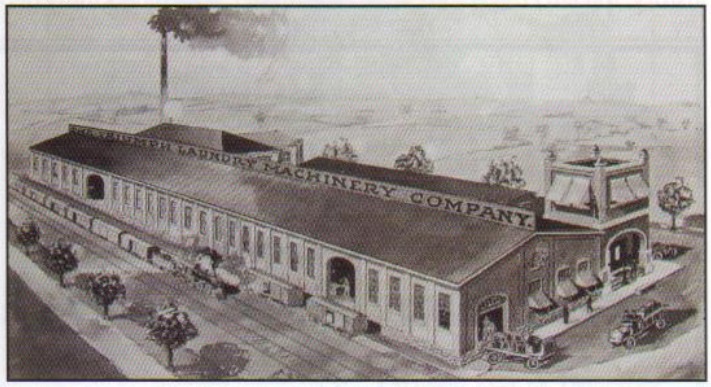
It immediately started with them for the crossing of Heaton Street, which is at a grade of about 1 foot in 12; it went readily over this and on through a rather soft ungraveled road towards Vine street. About midway, in a rather muddy place, the drive wheels revolved without pulling the load; the "claws" were put on the drivers, she then went on pulling both wagons through the soft ground and ascended Vine Street. The "claws were taken off," and she went on with her load through the streets of the city round several squares, preceded and followed by spectators in carriages, buggies and wagons, (the horses slightly shying but none frightening), back to the place of starting, and proved herself a good puller, hauling nearly one-half more than the estimated load.

Other visitors arriving who wished to see the performance, it was again started on the round through the streets with equal success, showing it could easily do all and more than was claimed for it in this way.

Mr. R. Hunchens, a gentleman from Laporte, Ind., extensively engaged in agriculture and other operations in that locality, being present and wanting one for use upon the level but comparatively soft plains of the Kankakee valley wishing to see how it would get along upon plowed ground, the crowd started for the farm of Wm. Campbell, Esq., about 1 ½ miles distant, with the engine following.

Permission being obtained from the accommodating proprietor, the engine upon its arrival entered a last year's cornfield which was then being plowed up; it went over the ground very well, crossing the plowed part without the least inconvenience, showing its perfect adaption for any practicable farm or field work.

To test fully its capacity to take care of itself and go through difficulties, it was directed down towards a low part of the field where the frost was just out, and where standing water had but just disappeared. It went down into this easily enough, but it needed a little help to get out. With an armful of sticks and two or three boards from the fence chucked under the drivers to give the "claws" a foothold, it proved equal to the emergency and came out all right, pulling its own weight with fuel and water of over 5 tons out of mud nearly up to the axles, without the slightest derangement or injury to any part of the machinery.



Here is an idyllic artistic representation of the Triumph Laundry / Empire Machine building from the 1914 edition of the *Butler County Atlas and Pictorial Review*. The facility was located at the northeast corner of Walnut Street and the tracks of the Cincinnati, Hamilton & Dayton Railroad. Note the license the artist has taken with the scale of the steam locomotive and freight cars to make the building look larger than it actually was. Today, this area is a vacant lot with no trace of its industrial past. Photograph of cut courtesy Neal Simpson