MORE MIMICRY AMONG FARM STEAM ENGINE BUILDERS

By Robert T. Rhode

Engineers and Engines Magazine for February and March of 2012 carried my first article about mimicry among farm steam engine builders. I mentioned wishing for answers to questions about why an engine by one manufacturer looks so much like an engine by another manufacturer. My second article on the topic of mimicry prolongs the wish for answers.

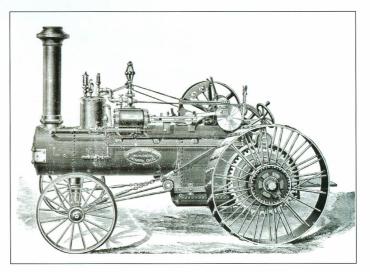


The Paxton engine in this photograph, which recently appeared in John Spalding's column, bears too many resemblances to a McNamar to be accidental. Courtesy John F. Spalding

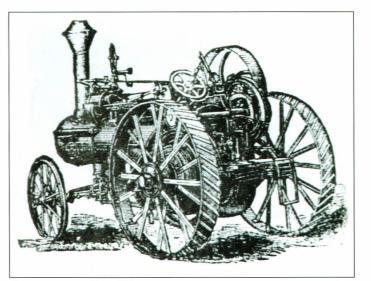


Here is a rare photographic image of the Lane & Bodley factory in Cincinnati, Ohio. The illustration appeared in the *Illustrated Guide* to Cincinnati and the World's Columbian Exposition published by Robert Clarke & Company in 1893.

Now that John F. Spalding has challenged readers to identify a Paxton engine, which was manufactured by the Harrisburg Car Company in Pennsylvania, I want to call attention to the fact that several subscribers thought the Paxton in John's historical photograph exhibited characteristics of certain McNamar engines, manufactured in Newark, Ohio. The similarities between the Paxton and such McNamar engines are striking! The steering wheel and the so-called "stump guard" beneath the smokebox are only two of many lookalike features. When John H. McNamar resigned from the Scheidler & McNamar Company to start a factory in competition with his former business partner



This engine depicted in Julius J. D. McNamar's 1906 catalog might be mistaken for a Paxton engine.



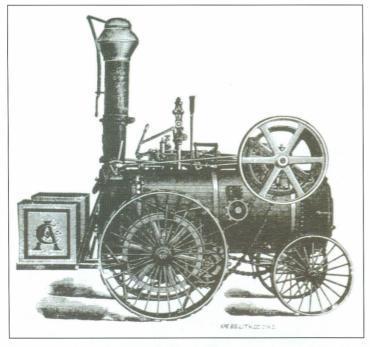
The Lane & Bodley traction engine as depicted in Jack C. Norbeck's *The Encyclopedia of American Steam Traction Engines* (1976) was nearly identical to a Paxton.

Reinhard Scheidler, did McNamar form an agreement with Paxton?

The mimicry involving Paxton does not stop there. On page 163 of his *Encyclopedia of American Steam Traction Engines*, Jack C. Norbeck offers a cut of a traction engine from a catalog advertising products of Cincinnati's Lane & Bodley Company. Lacking only a "stump guard," it is a Paxton in every respect. The existence of this illustration suggests three possibilities: (1) Lane & Bodley copied the Paxton, (2) Lane & Bodley built a Paxton under license to Harrisburg Car, or (3) Lane & Bodley sold Paxtons built in Harrisburg, Pennsylvania. Recently, Vernon Martin wrote to me



A longstanding rumor alleges that Advance-Rumely engines were designed to resemble the 65 HP Case. Here is an 18 HP Advance-Rumely, Serial Number 15275, built in 1922 and owned by Lavy Farms. This photograph was taken at the Miami Valley Steam Threshers Association show in Plain City, Ohio, on the 16th of July in 1994. Photo courtesy Robert T. Rhode



Various models of the C. Aultman Phoenix were reminiscent of the Stillwater. Those having curved-spoke flywheels (unlike the one depicted here) bore a pronounced resemblance to products of the Northwestern Manufacturing and Car Company, which eventually became the Northwest Thresher Company. This cut of a Phoenix is from the 1893 annual catalog.

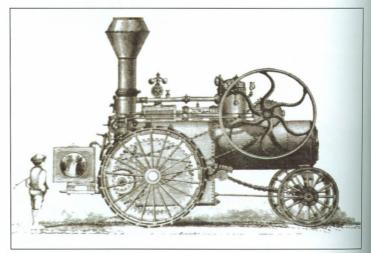
and Michael Raisch wrote to John about the Lane & Bodley engine's resemblance to the engine from Harrisburg. Michael further noticed that the Koppes & Brenneman engine that is pictured in the *Encyclopedia of American Steam Traction Engines* is a Paxton in both name and design. Vernon and Michael are talented detectives!

On page 66 of the new expanded edition of *The Steam Tractor Encyclopedia*, John and I present this information: "On January 19, 1915, the M. Rumely Company and Rumely Products went into receivership. The receiver, Finley P. Mount, masterfully directed the subsequent reorganization, which concentrated OilPull tractor manufacturing in LaPorte, Indiana, and steampowered thresher production in Battle Creek. The Advance-Rumely Company was launched on September 7, 1915. A rumor of considerable standing among steam aficionados has long held that Mount's mechanical engineers examined a 65 horsepower Case steam engine - a model developed less than three years earlier - while designing the new Advance-Rumely steamer. Although many discount such a possibility, there is at least a superficial resemblance in the silhouettes of the two engines."

While a "superficial resemblance" is not to be mistaken for an undeniable sign of mimicry, such resemblance can spark contem-



Was the 65 HP Case the basis for the Advance-Rumely? The silhouettes of such engines are somewhat similar. Photo courtesy Kenneth Erbskorn



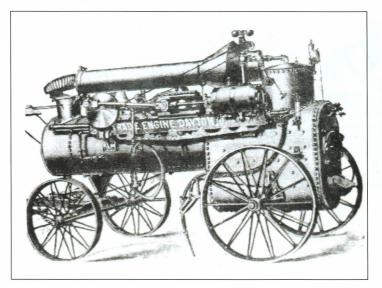
Built by the Northwestern Manufacturing and Car Company in Stillwater, Minnesota, this engine was similar to the Phoenix. From *The Encyclopedia of American Steam Traction Engines* by Jack C. Norbeck, 1976

Page 18

April-May 2012

Page 19

plation; for example, various models of the Phoenix engine built by the C. Aultman Company were reminiscent of the Stillwater engines produced by Northwestern Manufacturing and Car Company in Stillwater, Minnesota. Under the same classification of a general similarity could be filed the portable engine of Marshall, Graves & Company of Dayton, Ohio, which was similar to the Wood, Taber & Morse portable that featured so prominently in my first article on the topic of mimicry. While similar to the Wood, Taber & Morse, the Marshall was not *as* similar as other engines were. For a close similarity between two engines, readers are invited to compare the Erie City Iron Works portable depicted at the bottom of page 35 and the Farquhar portable depicted at the top of page 36 in Jack C. Norbeck's *Encyclopedia of American Steam Traction Engines* (1976).



This engine by Marshall, Graves & Company of Dayton, Ohio, might have been another of the many engines that looked to Wood, Taber & Morse portables for inspiration. From *The Encyclopedia of American Steam Traction Engines* by Jack C. Norbeck, 1976



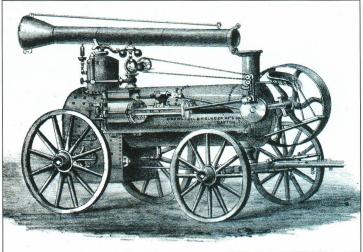
Courtesy of R. G. Bohman, Alpha, Illinois 61413

An 8 hp. Woodsum Steam engine No. 97 built by the Woodsum Machine Company, Dayton, Ohio, sometime in the 1870's. It is owned by C. B. Killing and R. G. Bohman. They believe it to be the only one in existence.

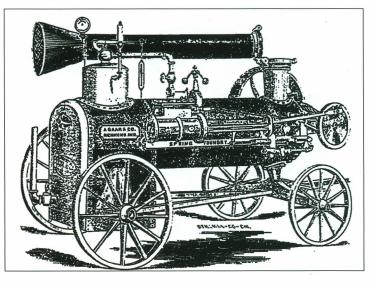
Stephen F. Woodsum and William Tenney of Dayton, Ohio, also produced a portable engine with the crankshaft outboard from the smokebox. In 1966, this photograph was published in *The Iron-Men Album Magazine*. It depicts what could well be the only remaining operational Woodsum portable engine.

Many superficial similarities among farm steam engines resulted from whatever was considered the best engineering practice of the time period. For several years, various firms placed the crankshaft in front of the smokebox. Among the manufacturers that adopted such a design were Abram Gaar's Spring Foundry in Richmond, Indiana; the American Foundry and Machine Works of Anderson, Indiana; the Brownell and Kielmeier Manufacturing Company of Dayton, Ohio; the Eagle Machine Works of Indianapolis, Indiana; William Heilman of the Heilman Machine Works in Evansville, Indiana; the Landis brothers, the predecessors of John Best & Company of Lancaster, Pennsylvania; Lane & Bodley; Robinson Machine Works in Richmond, Indiana; Sinker, Davis & Company of Indianapolis, Indiana; and Stephen F. Woodsum and William Tenney of Dayton, Ohio. As only the Landis brothers were located beyond Indiana and western Ohio, perhaps the placement of the crankshaft was largely a matter of imitation within a region.

In my previous article on mimicry, I related an anecdote involving the misidentification of a Minneapolis return-flue



The Brownell and Kielmeier Manufacturing Company of Dayton, Ohio, located the crankshaft in front of the smokebox. From an original print in the collection of Robert T. Rhode

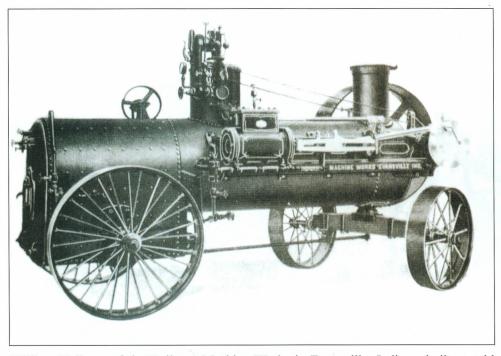


As depicted in a catalog from 1865, Abram Gaar's Spring Foundry in Richmond, Indiana, produced portable engines having the crankshafts before the smokebox.

engine as a Huber. I shared the story to show that John and I can make such mistakes. In response to the anecdote, Dean Dillaman wrote, "Actually, it happened twice in your book." Sure enough! John and I had misidentified an Avery returnflue engine as a Huber. We greatly appreciate the fact that Dean called the error to our attention. Future printings of the encyclopedia will be corrected, thanks to Dean's helpful observation. While neither April-May 2012

a Minneapolis nor an Avery is a Huber, even those of us that are accustomed to identifying engines in historical photographs apparently are capable of thinking we are seeing Huber engines where there are none.

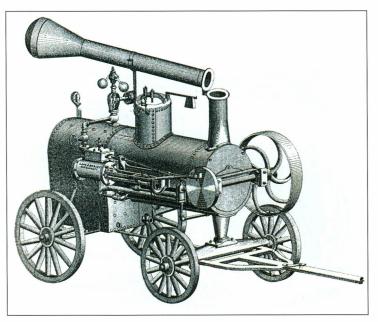
The Watertown portable and the Wheeler & Melick portable can be filed under the classification of exact duplication at the very least. Hoard & Bradford held the patents on a portable engine that



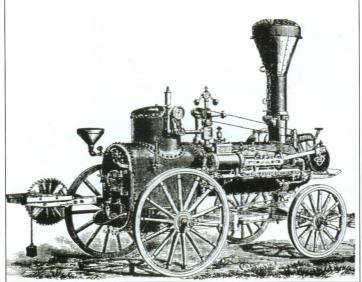
William Heilman of the Heilman Machine Works in Evansville, Indiana, built portables with crankshafts in front of the smokebox. From *The Album of American Steam Traction Engines* by T. H. Smith

eventually became known as the Watertown, named for Watertown, New York. Arguably, Gilbert Bradford's most important patent was Number 115,928, awarded on June 13, 1871. Hoard & Bradford merged with the Watertown Engine Company in 1873. Page 50 of Jack Norbeck's encyclopedia depicts an 1877 cut of a Wheeler & Melick portable engine. I have found the very same cut on page 204 of the American Agriculturist for May 1879, but the cut in the magazine was labeled a Watertown, not a Wheeler & Melick. I am beginning to wonder if Wheeler & Melick had a license to sell Watertown portables under the name of Wheeler & Melick. Similarly, the Cascaden-Vaughan Company sold Leader engines built by the Marion Manufacturing Company. I have no idea how Taylor of Westminster, Maryland, fits into this picture. One model of Taylor portable was virtually identical to the Watertown portable. In 1877, Taylor bought out the Utica Steam Engine Manufacturing Company, but, other than the fact that Utica was located in the state of New York, there is no obvious connection to Watertown. Incidentally, Utica built vertical-boiler engines, which Taylor continued to build after the acquisition of the patterns. I wonder if Watertown also licensed Taylor to produce portable engines based on Gilbert Bradford's design. It is possible that Wheeler & Melick portables are Watertown portables, in which case there is no mimicry.

I continue to search for causes to



Lane & Bodley likewise produced portables with crankshafts in front of the smokebox. From advertising pamphlet in the collection of the Cincinnati Historical Society



Robinson Machine Works in Richmond, Indiana, also manufactured portable engines with crankshafts out in front. From Michele Bottorff and William A. Stahl's *The History of Swayne*, *Robinson & Company*, 1842-1997.

April-May 2012

ENGINEERS & ENGINES

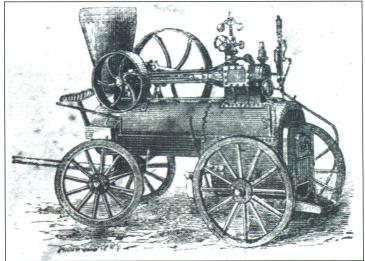
explain what appears to be deliberate mimicry among farm steam engines. Perhaps the answers lie in the proverbial expression that imitation is the highest form of flattery. I am deeply grateful to readers willing to share documentary evidence that helps to solve such mysteries.

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



This cut of a Watertown engine appeared in *American Agriculturist* for May 1879.

Can you think of other examples of steam engine manufacturers using identical or very similar designs? Or, do you know other causes to explain the mimicry among farm steam engines? If so, send them to Bob Rhode and look for them to be featured in an upcoming issue of E&E.



This cut of a Wheeler & Melick engine is dated 1877. Did Wheeler & Melick have a license to sell Watertown portables? From *The Encyclopedia of American Steam Traction Engines* by Jack C. Norbeck, 1976.

EARLY DAY GAS ENGINE AND TRACTOR ASSOCIATION, INC.

Submitted by Larry Voris, President and Director at Large, 2340 S. Luster, Springfield, MO 65804

Here it is March again and in southern Missouri, we haven't had any winter yet. But we still have March and that is when we get our big snow storms. So far we didn't need to go south for the winter.

With all the good weather, you should have all your winter projects about finished and ready for the first show. I am just about done with my project. I found a forklift attachment for an Allis Chalmers lawn tractor. They made these back in the late 1960s for the B-1 and Big Ten. This was a reproduction model and every thing was there except the 2-spool valve, hoses and the pump bracket. I had to do a little modification to make it fit on a 712-S. This tractor is about 10 inches longer than the B-1.

All the pictures in the brochures on the forklift show the driver turning

around when backing under the load. I have used forklifts for years and you need to be able to see where you are going with the forks. I'm too old to turn around anymore. To do this, I would have to change the seating, steering and the clutch/brake all around. I thought a long time how to make it steer when you are on the other side of the steering wheel. When you turn the steering wheel to the left, the tractor goes to the right. This would work, but very tricky and you could get in trouble in a tight spot. The 712-S steering arm is on the left side of the right side.

I made a bracket that went under the tractor so it would steer from the right side. I had to extend the spindle about 3 inches to install the new arm. Now, I can straddle the hood in front of the steering

wheel which is fairly comfortable and turn the steering wheel to the left and it goes left. By using a shuttle shift you can go forward and backwards without having to shift. The lift and tilt valve is on the left side of the tractor and positioned to where it is just below your right hand. Then with a set of dual wheels I think this will draw a lot of attention at a show. Old men and their toys! Isn't this what we are all about, entertaining the spectators that we charge to get in at the gate?

The National show for 2012 will be hosted by Branch 29 - August 18-19, Montana State University Ag Research Center/Huntley Museum of Irrigated Agriculture Grounds located east of Huntley, MT- Hwy 312. They will feature International Harvester tractors and equipment. Hope to see some of you there.