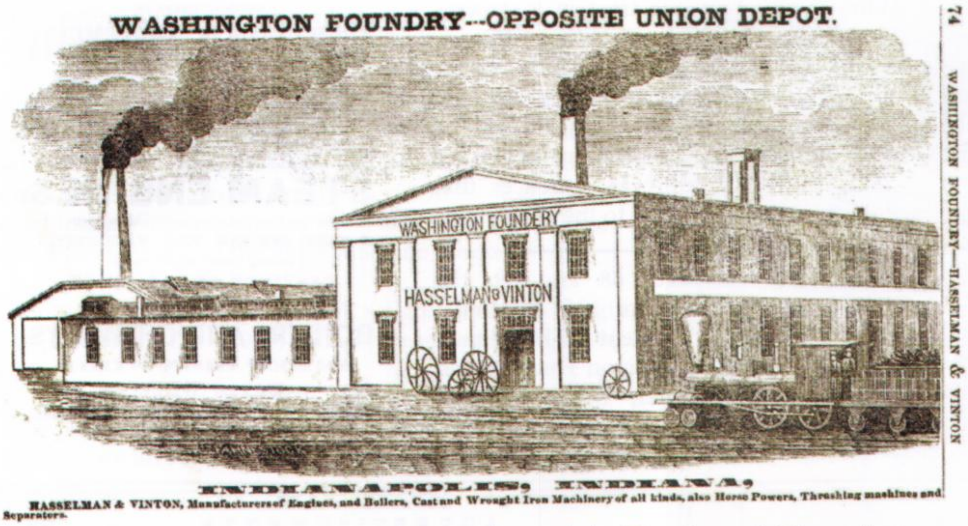
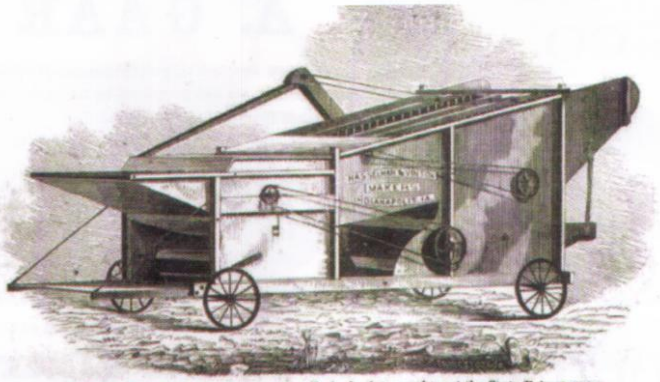
Gaar Began Portable Engine Production in 1857

By Robert T. Rhode and Mike McKnight



HASSELMAN & VINTON, Manufacturers of Engines, and Boilers, Cast and Wrought Iron Machinery of all kinds, also Horse Powers, Threshing machines and Separators.

The Indianapolis city directory for 1855–56 depicted the Hasselman & Vinton factory on page 74.

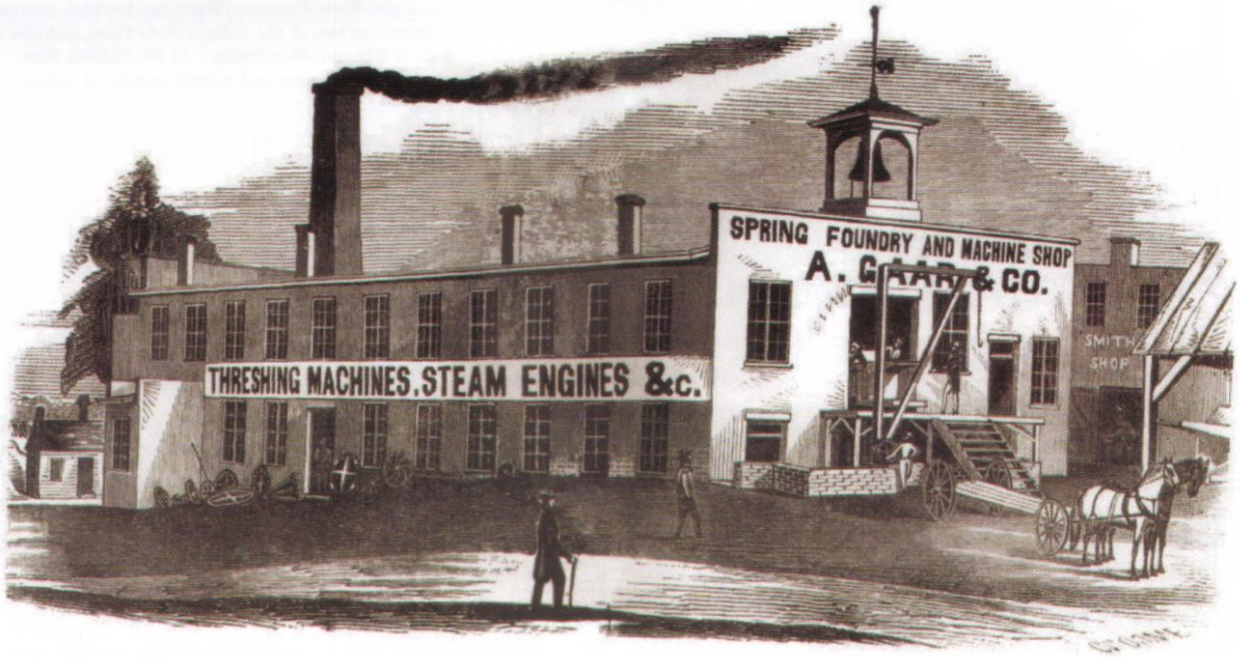


GEIZER'S THRESHER AND SEPARATOR.—Took the 1st premium at the State Fair of 1856.

Right: In 1856 (the year before the company allegedly copied a New York engine), Hasselman & Vinton won recognition for a "Geizer" patent thresher during trials conducted by the Indiana State Agriculture Committee. Obviously, Geiser of Waynesboro, Pennsylvania, held the patent.

When did Abram Gaar begin production of portable steam engines? Page 203 of Robert L. Ardrey's *American Agricultural Implements: A Review of Invention and Development in the Agricultural Implement Industry of the United States* (Chicago, 1894) unambiguously states, "The manufacture of portable engines was begun in 1852 … ." For a long time and for a variety of reasons, we have doubted Ardrey's year, which we have considered a little too early, but we have hesitated to challenge such a respected authority. Recently, we found a source offering a date more convincing to us.

An interview with Lewis G. Rule in 1907 established the year when Abram Gaar began production of portable steam engines. Several publications carried the interview or paraphrased it, as online searches reveal. Rule ran a sawmill south of the National Road (State Route 40) in Hancock County, Indiana. Rule said that, in 1856, Elwood Hillsen and Noah Small commissioned an engine builder in Troy, New York, to manufacture a threshing engine on a locomotive boiler. The builder must have been Charles F. Mann, whose Fulton Iron Works is well known. Mann displayed his engines at the 1853–54 "crystal palace" exhibition



Right: In 1857 (the same year that Gaar probably began building portable steam engines), *A Directory to the City of Richmond* carried this cut of the Spring Foundry between pages 98 and 99. Note that lettering on the side of the building promotes the firm's threshing machines and steam engines.

in New York. Hillsen and Rule were the first to run the newly acquired engine, which threshed on farms near Carthage, Indiana. Rule said that the builder (most likely Mann) came to Indiana to watch the engine in operation. According to Rule, the engine existed for many years. Rule continued by saying that, in 1857, Joseph Small and a company named Butler & Morris bought 8 HP engines, produced by the same builder (Mann). Morris lived near Dublin, Indiana. Rule said that Hasselman & Vinton* of Indianapolis copied Small's engine and began to manufacture similar engines. The firm of Hasselman & Vinton was the forerunner of the Eagle Machine Works, which built portable engines that closely resembled the Gaar portables. In 1861, Hasselman & Vinton won medals for engines at the Indiana State Fair. Rule also said that Gaar, Scott & Company made patterns from the engine belonging to Butler & Morris and initiated the manufacture of such engines in Richmond. If Rule was right, Gaar built its first engines in 1857 and Mann must have produced an engine that resembled Eagle portables and Gaar portables. We have not found an illustration of such an early Mann engine.

Why do we place our trust in a sawyer's 1907 recollection while doubting a historian's 1894 assertion? Lewis G. Rule was an eyewitness to the events he describes. He knew the people whose engines Gaar and Hasselman & Vinton copied. Further, in the single paragraph of three sentences that Robert L. Ardrey devotes to the Gaar enter-


INDIANAPOLIS ADVERTISEMENTS.

LEWIS W. HASSELMAN. ALMON B. VINTON.

WASHINGTON FOUNDRY AND MACHINE WORKS

INDIANAPOLIS, IND.

HASSELMAN & VINTON,

MANUFACTURERS OF

AGRICULTURAL IMPLEMENTS

HORSE POWERS, THRESHERS AND SEPARATORS, SUGAR MILLS.

STEAM ENGINES

For Grist Mills, Muley, Sash and Circular Saw Mills,

GRIST AND SAW MILL MACHINERY,

Shafting, Pulleys, Hangers, Gearing,

CASTINGS OF ALL KINDS,

Wrought-Iron Work, Bridge Bolts and Castings,

BOILERS AND CHIMNEYS

SHEET IRON WORK,

WATER WHEELS,

FOUNDRY & MACHINE WORK IN GENERAL,

See Engraving, opposite Page.

Right: Between pages 88 and 89, the Indianapolis directory for 1861 presented this full-page advertisement for Hasselman & Vinton of the Washington Foundry and Machine Works (later, Eagle Machine Works).


98 ADVERTISEMENTS.

A. GAAR. J. M. GAAR. W. G. SCOTT.

A. GAAR & CO.,

FOUNDERS & MACHINISTS,

Spring Foundry!

WEST OF THE DEPOT,

RICHMOND, IND.

—MANUFACTURERS OF—

Thrashing Machines

STEAM ENGINES,

WHEAT DRILLS,

MILL IRONS,

AND CASTINGS, &c.

Of every and all descriptions.


ADVERTISEMENTS. 99

A. GAAR & Co.,

Having erected large and commodious buildings and otherwise increased our facilites, we are prepared to furnish a large number of our celebrated machines for thashing and cleaning grain. These Machines are simple in their construction, but strong and durable. The frame work both in the

Separator and Horse Power,

IS PUT TOGETHER WITH JOINT BOLTS.

FOR FAST THRASHING, CLEANING & SAVING THE GRAIN,

THESE MACHINES

Stand Unrivalled,

and are sold from twenty to fifty dollars cheaper than any Ohio Machine. Our Eight Horse Power and Separator, has been awarded the first and highest premiums at two of the Indiana State Fairs, and also at many county Fairs both in this and other States. At the Indiana State Fair held in Oct. 185[illegible] we thrashed over one and a half bushels of wheat per minute with six horses and was

Awarded the FIRST PREMIUM,

A $25 SILVER CUP!

For BEST Separator & Cleaner,

and the first premium a $25 SILVER CUP, for the Best Horse Power.

We are prepared to furnish 8 Horse Power Separators, 6 Horse Power Separators and 4 Horse Power Separators, each kind driven by either

TUMBLING SHAFT OR BELT,

As may be prefered by the purchaser. From long experience, and by giving strict attention to the manufacture of our Machines, we feel confident that we can supply our customers with the best Machine in use.

A. GAAR & CO.

SPRING FOUNDRY, RICHMOND, IND.

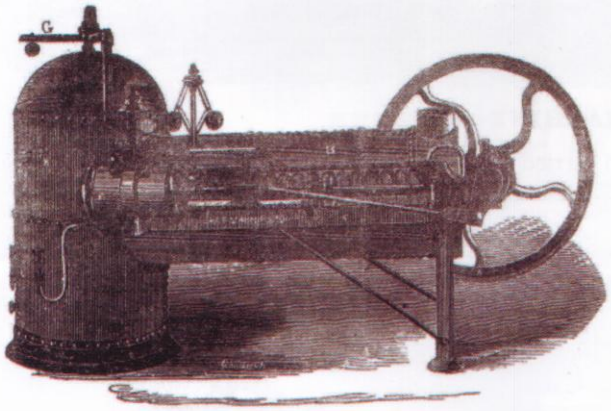
These ads on pages 98 and 99 of *A Directory to the City of Richmond*, published in 1857, mentioned not only horse powers using tumbling rods but also steam engines. Evidence suggests that Gaar initiated production of portable engines in that year.

prise, Ardrey makes an obvious mistake in saying that the business began in 1835; several reliable sources from the Gaar factory and from the Gaar family verify that the business began in 1836. If Ardrey was capable of one error, he was capable of two. Finally, thresher production at the Gaar factory and at Hasselman & Vinton began in 1852, and our instincts tell us that both firms sold threshers for a few years before making the commitment to manufacture agricultural engines.

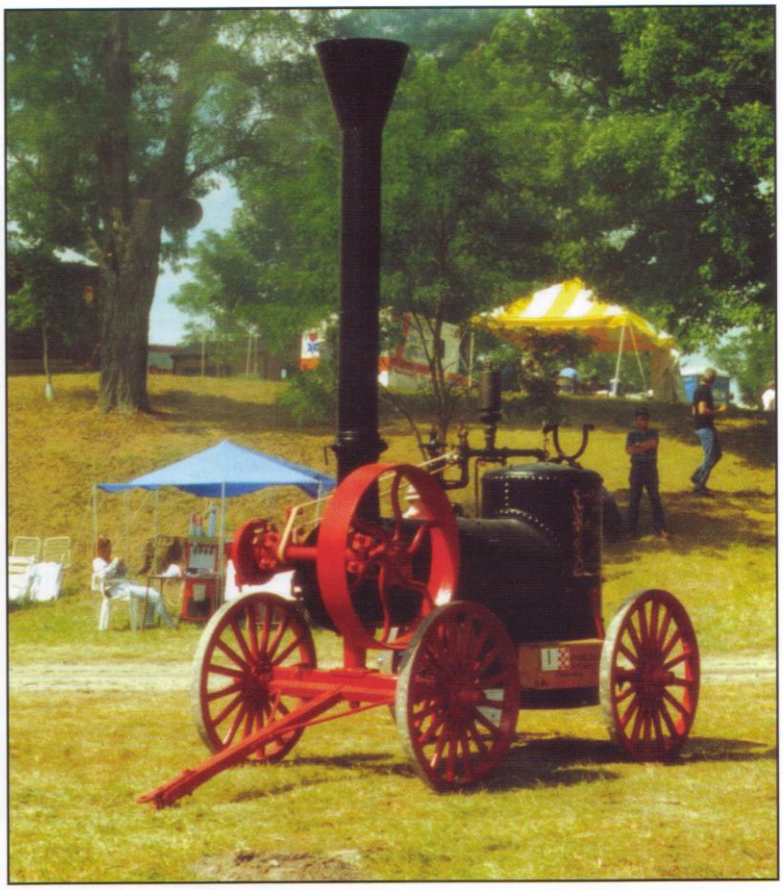
*IndianaHistory.org says, "Almus E. Vinton and Lewis W. Hasselman founded the Washington Foundry and Machine Works in Indianapolis in 1850. The company made agricultural implements, steam engines, grist mills, and sawmill machinery. Vinton retired in 1865, and Hasselman reorganized the business as the Eagle Machine Works."

Contact Gaar authority Mike McKnight at 925 McKnight Loop, Mason, TN 38049; e-mail: steamdaddy75@yahoo.com

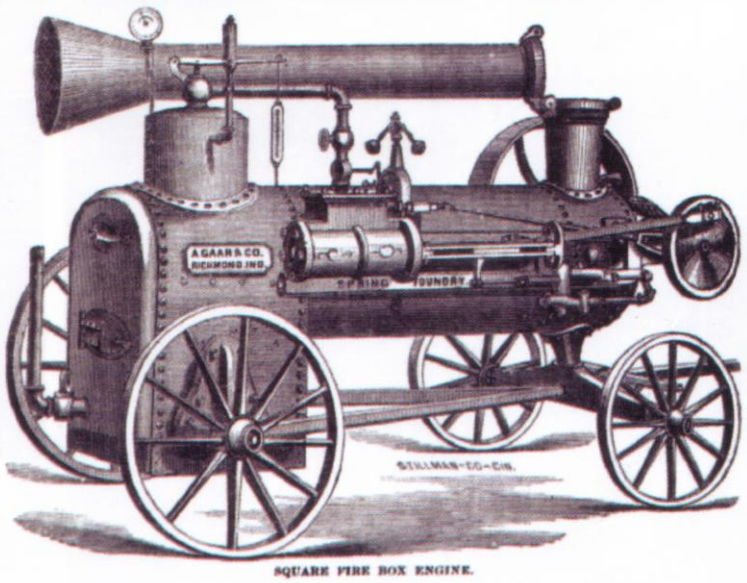
Contact steam historian Robert T. Rhode at 990 W. Lower Springboro Rd., Springboro, OH 45066; e-mail: case65@earthlink.net



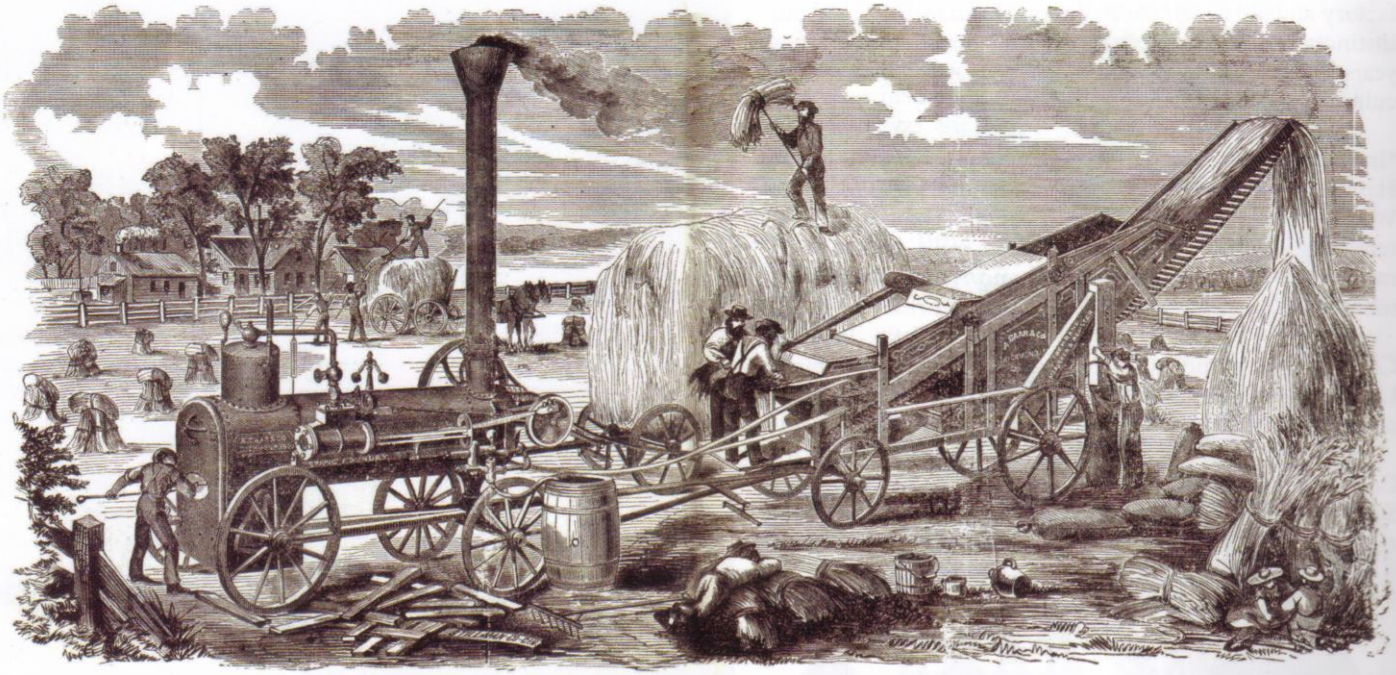
This cut of Charles F. Mann's engine of 1857 appears in Kenneth L. Cope's *American Steam Engine Builders*; it substantiates the possibility that Gaar and Hasselman & Vinton copied a T boiler engine. Courtesy Astragal Press



Here is Bill Stahl's 1864 10 HP A. Gaar engine with what historians call a "T boiler." The photograph was taken on the 6th of August in 1994 at the annual show of the Pioneer Engineers Club of Indiana in Rushville. Photo courtesy Robert T. Rhode



Gaar's "Square Fire Box Engine" was featured on page 127 of the *Twentieth Annual Report of the Ohio State Board of Agriculture* (Columbus, Richard Nevins, 1866). The same cut appeared above the caption "Gaar's Improved Threshing Portable Engine" on page 184 of the *Tenth Report of the Indiana State Board of Agriculture* (Indianapolis: Douglass & Conner, 1868).



GAAR'S STEAM THRESHING MACHINE AT WORK.

Pages 26-27 of *The Iron-Men Album Magazine* for March and April of 1964 carried this illustration of essentially the same Gaar engine depicted in the Ohio 1866 report and the Indiana 1868 report. The artist exaggerated the scale of the engine compared to the height of the engineer, presumably to make the engine seem more powerful.