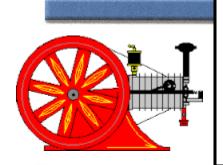


The Line Shaft

The Official Newsletter of the

NORTH JERSEY ANTIQUE ENGINE & MACHINE CLUB



April 2021



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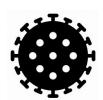
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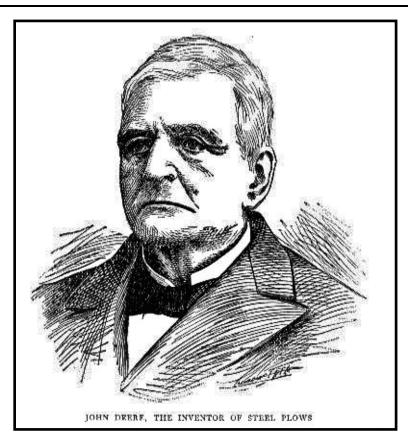
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Founded on October 15th, 1979 by: Arthur Goble, Fred W. Westbrook, John Snook, Roy Bischoff & Lewis Quince





A picture of John Deere that hung in most dealerships for 100 years...note caption and see Page 2 for story!

Our next meeting will be on April 8th 2021 at 7PM at the SHED

We've lost two members of the club this winter...see pages 2 and 3

Dues are due...see attached

Our Web Address: njaemc.org

67 Branchville Lawson Rd., Newton NJ 07860



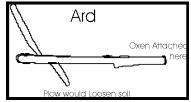
John Deere, Inventor of Steel Plows

Proving once again:

FAKE NEWS is not a recent innovation!

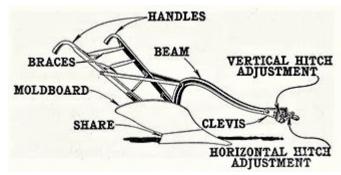
What is the difference between the words PLOW and PLOUGH. Actually, they mean the same thing: "either" to till the soil (verb) or the tool used to till the soil (noun). Plow is the general term used in North America (the US and Canada) and the term Plough is used in the rest of the English speaking world...and sometimes in North America prior to 1900.





The plow has been around since the First Century and was originally called an ARD or SCRATCH PLOUGH. Made of wood, they were basically a stick that cut a deep furrow in the ground, but did not turn the soil. They were upgraded to heavy wooden (with a touch of metal) SHARE PLOWS in the centuries that followed, however, these plows would only have minor innovations for the next 16 centuries.

The <u>inventor</u> of the 1st practical fully METALIC plow was Charles Newbold of Chesterfield Township in Burlington County NJ. He received a patent for a cast-iron plow on June 26 1797. Broken pieces of Newbold's original plow are on display at the *New York Agricultural Society* in Albany NY. In the early 1800s David Peacock, also of NJ, and Jethro Wood of NY both received numerous patents for cast iron plows and improvement to them...including a steel plow share (cutting edge). These plows were serious improvements over wooden plows, but the casting surfaces were rough (like their wooden counterparts and sticky dirt stuck to them) and the entire plow was brittle and prone to breakage. These did not sell well as farmers had some "preconceived and nonsensical" notion that the iron and steel would POISON-THE-SOIL. By the 2nd decade of the 1800s, Jethro Wood had developed the 3-piece plow with replaceable "standardized" sections, that allowed for the repair



of a broken plow in minutes. Also, the farmers came to their senses and the metallic plow became a semi-fixture of the farming industry...they began to SELL!

In 1833 John Lane, a blacksmith in Lockport Illinois made the first all steel moldboard plow by cutting a rotary steel sawblade into strips and hammer-welding the strips together. Lane's plow was stronger than the cast-iron plows and the polished steel finish shed dirt, so there was no build-up. The plow were produced in Lockport and sold

under the name "LOCKPORT CLIPPER" and was colloquially called "THE SOD BREAKER". Lane did not patent the



Paul Havens Vice President 1959-2021

We are sorry to report the passing of our club member and friend on January 16th 2021.

Our condolences go out to Deb and all of his family and friends.

Rest in Peace!

new plow...but when he died in 1857, the SCIENTIFIC AMERICAN noted in his obituary: *John Lane Sr., the inventor of the steel plow*. Note: The SCIENTIFIC AMERICAN (often called: SA) was first published in 1845 and is the oldest <u>still published</u> magazine in America.

During the 1800s, many blacksmiths produce one-off iron and/or steel plows for their customers, disregarding patents etc., if they even knew they existed...communications were poor and it was only a side-line to their normal business.

In 1837 along came John (Johnny-come-lately) Deere. A Vermont native, Deere had a blacksmith shop in Grand Decatur Illinois and began tinkering with smooth steel surfaces for existing wooden farm plows. Using the steel from an old rotary saw blade (probably totally oblivious to and independent of John Lane's LOCK-

PORT CLIPPER) he fashioned his own steel plow. It proved commercially successful with local farmers and by the mid-1840s he and a partner were producing one thousand steel plows a year and selling them throughout the mid-west. They moved beyond the OLD saw blade concept and had improved the steel quality to the best "available" in its time. ...originally from Europe and later from Pittsburg.

The <u>PARTNER</u> is another wrinkle to the story. Leonard Ardus, who history recounts as the owner of the saw mill where Deere got the OLD USED BLADE, elevated Deere from a one-man-band blacksmith to a manufacturer. Ardus would become Deere's partner in the plow manufacturing business and was the money man, with both



business and sales experience...Deere and Ardus traded as the: *L. ARDUS PLOUGH MANUFACTORY*. They spit up in 1848, with each continuing to build plow blades separately. Deere set up his own company in Moline Illinois and the Ardus company was eventually bought by the *J. I. Case Threshing Machine Co...*.who, from time to time, have also claimed Leonard Ardus as the inventor of the steel plow!

Neither Deere nor Artus patented their plow and quite probably infringed on those who had. However, they made the "steel" plow a common-place commodity!

In 1868 James Oliver of South Bend, Indiana received a patent for the "CHILLED PLOUGH"...a hi-tech version of a layered steel plow developed and patented by John Lane Jr., son of the THE SOD BREAKER manufacturer. Oliver developed a process that "surface hardened" the steel to an extremely hard and glassy finish, while the core remained relatively soft and TOUGH. This removed the brittle problem previously associated with plows and is still used today on both farming and construction equipment and called CASE HARDENED STEEL. By the turn of the 20th century, the Oliver *Chilled Plow Works* would employ over 1000 workers and produced in excess of 300,000 plows a year...living up to it's slogan "Plowmakers for the World"! The company would eventually become the *Oliver Farm Equipment Corporation*.



Dave Betts Former Treasurer 1953-2021

We are sorry to report the passing of our club member and friend on February 3rd 2021.

Our condolences go out to Sandy and all of his family and friends.

Rest in Peace!

NJAE&MC—Upcoming Events

Next meeting: April 8th at the SHED...7PM

Future Events:

2021

We are in the process of organizing a TRACTOR PLOW DAY to honor our two club members who passed away this year!

More info will be available in the next newsletter...

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