



The Line Shaft

The Official Newsletter of the

NORTH JERSEY ANTIQUE ENGINE & MACHINE CLUB

JULY 2012

Editors:

Tiffany Redding
(862) 266-4022

Christina Francisco
(973) 600-1098



President: Blace Flatt
(973) 663-1090

Vice Pres.: Andrew Mackey
(973) 627-2392

Treasurer: AnneMarie Adams
(973) 946-1726

Secretary: Jeff Brooks
(973) 570-2749

Our Web Address: njaemc.org

In Case You Were Wondering . . . **Here's What Was Discussed at Last Meeting. . .**



There were 29 members present at last month's Engine Club meeting.

Ann Marie started off the meeting by giving the financial report. We are starting to build up our checking account again; thanks to the donation of the Pedal Tractor and the Quilt for the fair. We should be able to come away with a little extra in the account after the Fair.

Blase passed around the sign-up sheet for the Fair. You signed up for either morning, afternoon or night time. We will be working in 4 hour time slots. You can choose between selling peanuts, shed information, or working the front counter

We will be having our Tractor Supply show in Sussex on July 14th from 9:00 until 2:00. If you plan on attending, please bring some sort of snack type food.

Blace also informed members that this year the Fair Grounds want all clubs at the Fair Grounds to sell Raffle Tickets for the fair. Each member is asked to sell two books of tickets. We passed out books during the meeting.

We will attempt to have our Tractor Show and Swap Meet on September 8th at G&H Service in Newton. We will have more info as the time grows closer.

Sincerely Your Secretary,
Jeff Brooks

Photo ID dates FOR THE FAIR

July 10th from 8:30 am - 2:30 pm
July 18th from 4:00 pm - 7:00 pm
July 26th from 2:00 pm - 7:00 pm
August 1st from 9:00 am - 4:00 pm

OUR NEXT MEETING WILL BE AT THE ENGINE SHED ON THURSDAY JULY 12TH AT 7 PM

(Get there at 6 pm to socialize)

FOUNDED ON OCTOBER 15, 1979 BY: Arthur Goble, Fred W. Westbrook, John Snook, Roy Bischoff & Lewis Quince

JACKTOWN Meet on May 20th, 2012



Did You Know...Tractors Were Once Steam Powered...

As the American farm entered the 1800s, its main source of power came from three animals-the horse, the mule, or the ox. The average farm worked by horses was 100 acres, and a farmer walked 8 miles per acre to plow his fields (with a walking plow) at the average speed of 1 1/2 mph. With 100 acres, the farmer walked 800 miles to plow his fields. And he still had to plant the crop, and cultivate! For wheat and other crops the grain had to be separated from the chaff with a machine called the thresher. The thresher was powered by a power sweep, which was turned by horses. Everything depended on the strength and durability of humans and horses.

In 1849, things began to change. Some of the first portable steam engines for farm use were built in this year, in Philadelphia. They only provided belt power for machines like the thresher. There were three sizes-4, 10, and 30 horsepower. The 4-hp model sold for \$625 and the 30-hp model sold for \$2300. That was a lot of money back then! These machines were also heavy; the 4-hp model weighed two tons, or 1000 pounds per horsepower!

These machines were pulled from field to field by horses. The steam engine provided steady power, it didn't tire after hard work, and it only was "fed" when it worked; instead of all year round, like animals. Yet these machines were still crude, and a low steam pressure of 50 to 90 p.s.i. limited the amount of work that could be done.

Over the next few years, the steam pressure would be steadily increased with better quality material and construction of the boilers. However the greatest change of the steam engine would make it unforgettable for the next 150 years-"Self Propelled" steam engines began their debut in 1855. At first they were just a normal "Portable" engine, with chains or gears connecting the crankshaft and the rear wheels. They couldn't even steer! They still needed horses to turn. But the self-propelled engine could also pull its thresher behind it.

If a steam engine could pull a thresher, it could also pull another type of load-the plow. In 1855, a "steam plow" was used by its inventor Obed Hussey. In 1858, Joseph Fawkes used his 30-hp engine; named "Lancaster", for a plowing demonstration at the Illinois State Fair. The engine and plow were then taken to the U.S. Agricultural Society's contest in Chicago where it won the championship. The steam engine that could be used for plowing, pulling, belt work, or other uses became known as the Steam Traction Engine.

Then, development of the steam engine slowed as the Civil War began. Most industry was used to produce weapons of war. However, the Armies required more food, and the Armies took many men from their farms at the same time. The few men and women left on the farms needed to use technology to keep up with demand. So the small number of steam engines (mostly portable types) became more popular. Yet the war kept farmers from getting the technology they wanted. It would have to wait until after the war...

After the war, steam engines steadily improved in technology and quality. Many different types and manufacturers of engines sprung up. Case, one of the largest manufacturers of steam engines, made its first engine in 1876. Port Huron began in 1882. In 1880, a patent was issued for a steering device; the steam engine could make itself turn! Then came the invention of the clutch (very high technology!). Steam pressures of 150 p.s.i. became commonplace. Work was easier for the farmer as the steam engine pulled the plow, and turned the belt to thresh the grain.

The steam traction engine's popularity soared during the 1890s. But, so did the horse's popularity. Just as the Eli Whitney's cotton gin needed more slaves; the steam engine required more horses. The steam traction engine could plow, haul huge loads, and power the threshing machine all day. It needed plenty of fuel and water, which was brought by horses. The increased amount of tilled land needed to be planted, and cultivated, which the steam engine was too big to do.

Groups of farmers formed "threshing rings" in order to pay for the costs of an engine and thresher. It was very expensive; a 110 hp engine from Case could cost over \$3000! The farmers began to realize that the steam engine, while useful, still didn't keep expenses down enough (when you add horses to the bill) to make them useful to the small farmer. Only larger farms could afford them. As the "newfangled" gasoline engines became more reliable, and smaller, they began to cut into the steam engine's market. From 1900 and on the steam engine became less popular. In 1924 came the Farmall, a gas tractor that could do all the jobs on the farm. It was the final nail in the coffin. Steam production stopped a few years later. A few steam engines worked 'till World War Two. Then many were lost in the scrap drives. Not too many are around today, and you can only see them at antique tractor shows. Just look for the plumes of coal/wood smoke, and listen for the whistles.



Letter From the Editors

HOPE ALL OF YOU HAD A SAFE AND ENJOYABLE FOURTH OF JULY! We would like to thank Jeff and



Dave for corresponding back and forth with us when we could not make the meetings. If there is anything you are working on that you would like to put in the newsletter, please contact us- redding55@yahoo.com and (Christina's new email) FranciscoChristina17@gmail.com so we can make this happen! Thank you for all of your articles! We greatly appreciate them! See you at the next meeting!

Sincerely Your Editors,
Tiffany Redding & Christina Francisco

**SELL THOSE
RAFFLE
TICKETS!!!!**



**The fair is right
around the corner!!!
PLEASE SEE THE
FIRST PAGE FOR
TIMES TO GET
PICTURE ID PASS
FOR FAIR!**

MARKETPLACE

WANTED: 14.9 x 24 used tire
CONTACT: Ken Reuter, 973-670-1646

FOR SALE: International Cub Cadet 102; repainted, just needs wire harness. \$400 **CONTACT:** Paul Curcio, 33 Central School Rd., Wantage NJ 07461, 201-835-5924, PaulF350@yahoo.com

WANTED: Backhoes-Compact Tractors-Mini Excavators-Skid Steer Loaders-Cletrac & Oliver Crawlers-Farm Tractors-Small Dozers... in any condition. "Top \$ Paid"
CONTACT: Robert Norman, 845-858-8242

FOR SALE: Gravely Model L Walk-Behind with rotary brush cutter. \$200
CONTACT: Dave Betts, 908-303-1994

FOR SALE: Steam bent ash hardwood walking plow handles; high quality straight grain. \$30 per pair.
CONTACT: Bruce Mitchell, 973-702-1012

FOR SALE: Premier Designs jewelry or host jewelry trunk show. Donations to NJAE&MC from sales.
CONTACT: AnnMarie Adams, 973-946-1726, AnnMarieBAdams@aol.com

FOR SALE: 2 ea. 154 International Harvester Low Boys; one ran 3 yrs ago when shut down, under tarp, has Woods 59 inch belly mower. 2nd tractor running, needs brake work, has rear mount 3 point hitch with hammer type mower attachment. Both with long personal ownership. For sale or trade for older Cub Low Boy with plow and/or attachments, or 8/9N Ford.
CONTACT: Charles Germershausen at cgermershausen@hotmail.com or call cell 1-973-214-5968. Tractors located in Florham Park, NJ.

WANTED: Spare parts for 1917 Fairbank/Morse hit & miss engine. Ford Golden Jubilee steering wheel
CONTACT: Charles Germershausen at cgermershausen@hotmail.com or call cell 1-973-214-5968.

FOR SALE: 2 Goodyear 16.9 x 24 6 ply Industrial Sure Grip Tractor/Backhoe tires. Approx 40% tread. Good condition, great for spares. (These tires are \$800 each when new) Asking \$125 each or willing to trade for decent 11.2 x 28 tractor tires for Ford 2N.
CONTACT: John at 973-919-0369

WANTED: Parts for International M Hit or Miss Engine. Piston, sleeve, etc. needed, all parts considered.
CONTACT: John at 973-919-0369

FOR SALE: Air Powered Press and Brake - \$300.00, Air Powered Transfer Pump - \$200.00
CONTACT: Don DoNofrio - 973-627-3706

**Sussex's Tractor Supply
has donated paint.
Come to the meeting and
see what we have.
GOOD DEALS TO BE HAD!**

UPCOMING EVENTS

**NEXT MEETING
THURSDAY, JULY 12th, 2012
AT 7PM
at the Fairgrounds Engine Shed**

**TRACTOR SUPPLY SHOW
IN SUSSEX**

Saturday, July 14th
9 am - 2 pm

**NJ STATE FAIR
Friday, Aug. 3rd - Sunday, Aug. 12th**

**TRACTOR SHOW
& SWAP MEET
Saturday, September 9th
at G & H in Newton
Time TBD**