



# The Line Shaft

*The Official Newsletter of the*

**NORTH JERSEY ANTIQUE ENGINE & MACHINE CLUB**

April 2014



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(973) 997-5284

**Our Web Address: [njaemc.org](http://njaemc.org)**

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

The March 13th meeting was held at the administration building and there were 34 members in attendance. AnneMarie read the financial report and it was accepted and approved. Blace brought up the topic of the club selling State Fair logoed toy trucks to generate income for the fairground. There was a discussion on having the club clean a fairgrounds "drainage ditch" at the next meeting or the Saturday following...it was met with mixed reviews. Bob Triebel won the 50-50 and turned the proceeds back to the club...thank you Bob.

## Military Transport Association Show



The MTA's 13th annual SWAP MEET will again be held at the *Fairgrounds* on April 26th and 27th...it would be appreciated if you could bring a tractor, truck or engine. Call Jeff Brooks to "enlist" or if you need any further information at: 973/997-5284!

## Spring Plow Days Event

### Green Valley Farms

997 Route 23N Wantage, NJ 07461

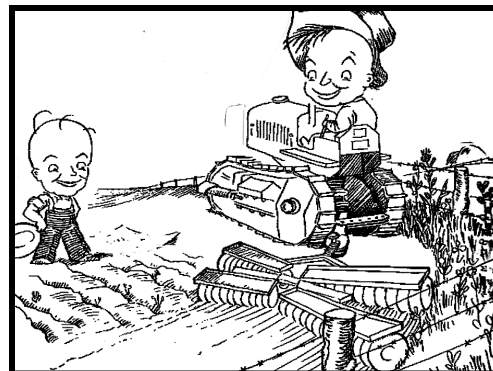
Same place as last year!

**May 3rd 2014**

Lunch will be available...

Plow participants arrive at 9:00 AM for the drivers meeting!

All tractors must have fire extinguishers to participate...



A 2nd Plow Days Event will be available for club members who are interested. The event will be held on Saturday May 17th at 9AM .

Location: Sammis Farms is McAfee NJ...if interested call Chuck Klim at 973/948-0693

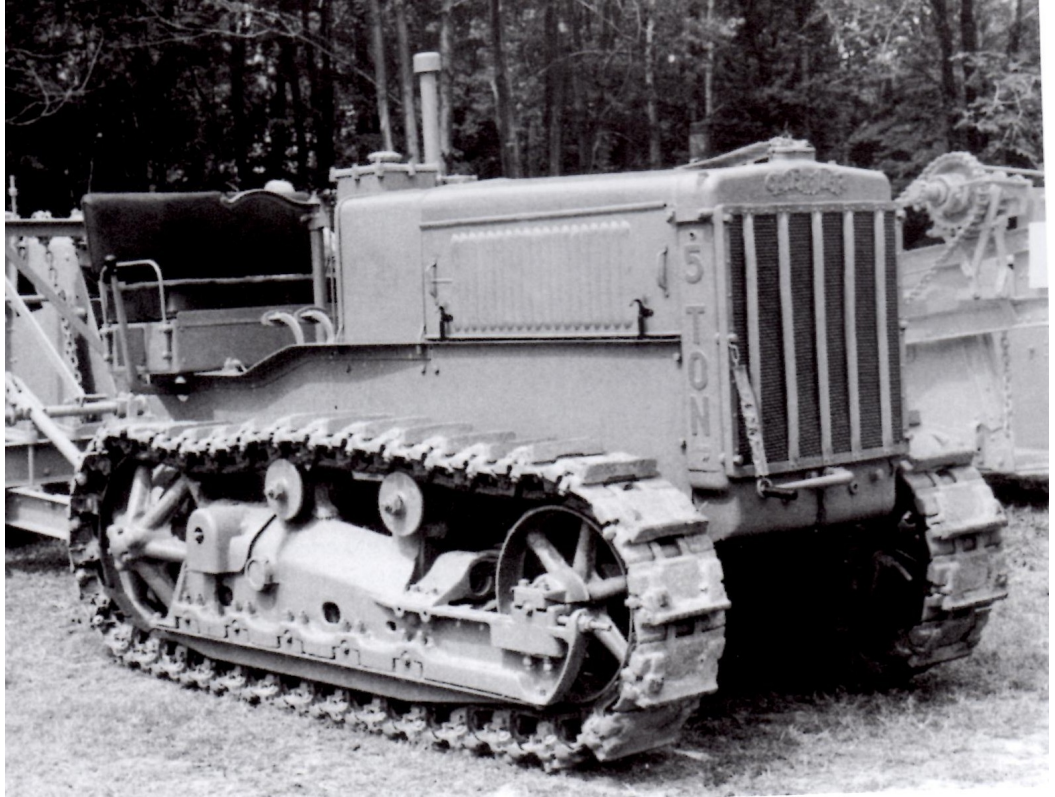
*Our next meeting will be at 7PM on April 10th 2014 at the shed!*

# Holt-REO-Maxwell Farm Tractors go to WAR

I keeping with the upcoming Military show, we thought this a good moth to include this article!

Right after the “Guns of August” kicked off the “war to end all wars” in 1914, Holt Manufacturing engineers arrived in England with a standard Caterpillar farm tractor and demonstrated it to the British army, who found it quite interesting. After the soil of the Western Front had been churned into a muddy morass by shell fire and trench warfare, Allied forces desperately needed a way to move heavy artillery and supply trains through the muck. Both the British and French armies began to look seriously at Holt’s crawler tractors.

The British, French and Russian armies placed orders with Holt, which eventually (although accounts vary) sent 1,200 to 1,400 Holt crawler tractors of various



sizes to Britain and France, and, before the Bolshevik Revolution, maybe 100 to Russia. This was during the early years of the conflict, before the U.S. entered the fray, when we were officially neutral and unable to sell armaments. Holt officials, truthfully enough, maintained that they were selling standard agricultural machines and had no responsibility for how the customer used them.

## Resistant to new technology

The U.S. Army was slow to adopt crawler tractors and motorized trucks, even though Brigadier General John J. Pershing, who led the 1916 Mexican punitive expedition, said later, “The expedition ... would have been impossible without the tractor and motor truck.” Although the Army ran several tests on tractors as early as 1912, the big concern was that motor vehicles required a constant fuel supply, while the ubiquitous Army mule needed only a minimal supply of forage, which could often be obtained locally.

In May 1915, eight months after the European war started, the War Department authorized a test of a Holt 75 at the Rock Island Arsenal – provided the Holt company paid all expenses. More tests that fall at Fort Sill finally convinced the hidebound Army brass to convert the 9th Field Artillery Regiment, stationed at Schofield Barracks in Hawaii, to a fully motorized outfit.

## Ramping up production

In 1916, the U.S. Army Ordnance Corps placed an order for a number of “Holt 45 tractors or its equal.” In response to this order, Holt developed the armored “Artillery Tractor 5-ton Model 1917,” although it wasn’t ready for another year.

The 4-cylinder gas engine was identical to the “Liberty” engine used in Army trucks built by several manufacturers. The 424-cubic-inch engine turned 56 hp at 1,200 rpm and had a vacuum fuel pump to supply fuel on steep grades. The 5-ton crank-start tractor had a 3-speed transmission, along with steering clutches operated by a tiller-type steering lever and individual brakes. Although the engine compartment and radiator were protected by 1/4-inch armor plate, neither the operator nor the two rear-mounted 17-gallon fuel tanks had any protection.

The Holt company was already committed to supplying tractors to England and France. War Department orders for another 3,000 or 4,000 crawlers stretched the firm’s capacity beyond its limit. Holt’s employees worked six-day, 48-hour



weeks with lots of overtime and still couldn't keep up. To ease the strain on Holt factories, manufacture of the Holt 5-ton armored artillery tractor was farmed out to two other companies, Reo Motor Car Co., Lansing, Mich., and Maxwell Motor Co., Detroit.

### **Proud heritage**

Reo, of course, was named for the initials of its founder, Ransom E. Olds, who in 1899 had started the original Olds Motor Co. of "merry Oldsmobile" fame. Olds moved on in 1904 and formed Reo, building cars until 1936 and trucks until 1957, when Reo became part of White Motor Co.

Jonathan Dixon Maxwell and Benjamin Briscoe launched Maxwell-Briscoe Motor Co. in 1903 and built cars in several locations until Briscoe left in 1912 and Maxwell established Maxwell Motor Co. in Detroit. The firm built medium-priced cars until the early 1920s when it fell on hard times. Walter Chrysler took over the ailing company in 1924 and it soon became Chrysler Corp., still in existence today.

In 1917, Reo and Maxwell had reputations for building dependable products and both had extra manufacturing capacity, so they were licensed to build the 5-ton armored artillery tractor. One source tells us that Reo made 1,477 tractors, while Maxwell produced 2,193. The tractors made by Reo and Maxwell used the Liberty engine, had the letters "USA" cast into the top radiator tank instead of "Holt," and bore their own company identification tags.

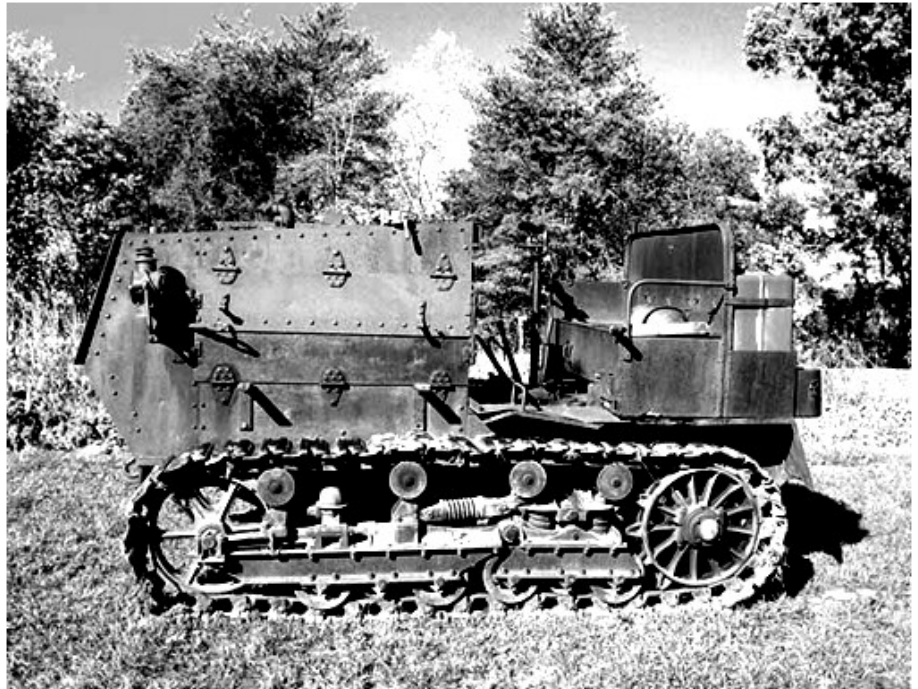
### **Swords into plowshares**

After the war ended in 1918, all military contracts were abruptly cancelled, leaving Holt (and probably Reo and Maxwell, as well) with 5-ton tractors in inventory. Holt converted most of those to civilian use and sold them as 5-ton Model T11 tractors.

Of course, the Army still owned a number of 5-tons and probably used them for several years, explaining why a Maxwell 5-ton tractor accompanied the 1919 American cross-country expedition

*In 1925 the near bankrupt Holt Manufacturing Co., in a move that today would be considered illegal, joined with its top competitor the C.L. Best Tractor Company, to form the Caterpillar Tractor Company.*

One or two 5-ton armored artillery tractors survived, including the one shown in photos accompanying this column. Built by Reo, it was owned by Harold Chambers, Winfield, Tenn., who graciously provided the photographs for this story. Harold has since sold the tractor to a collector in England and the machine was featured in the British tractor magazine *Vintage Tractor & Countryside Heritage*, to which I've subscribed for several years



Sam Moore

# **FARM COLLECTOR**

**Dedicated to the Preservation  
of Vintage Farm Equipment**

# MARKETPLACE

**For Sale: Wheel Horse Lawn Tractor...needs motor work , no attachments,  
\$200.00 or BEST OFFER...Call Danny H. 862/266-7362**

**For Sale: 1924 Hercules/Jaeger 2HP, 1918 IHC M needs TLC, (2) Delco 32volt light plants, NOVO Square Hopper for parts  
Call Andy Mackey 862/432-1552**

**For Sale: 2500 WATT 1958 Onan Generator with manuals...not running!  
Call Martin Little 973/875-4511**

**For Sale: Sears FF-20 Lawn & Garden Tractor w/42" mower  
Call Kevin Adams 973/819-9330**

**For Sale: Steam bent ash plow handles, \$30.00 a pair  
Call Bruce Mitchell 973/702-1012**

**For Sale: 3-Point Hitch 6' wide Brush Hog (came off 9N Ford tractor)  
Call John Stickle 862/397-3782**

**For Sale: 1952 Ford 8N w/grader blade & York Rake, asking \$2,500.00  
Call Jim Dunlap 973/219-9694**

**Wanted: Manuals & Parts for Witte 6-HP horizontal diesel  
Call Andy Mackey 862/432-1552**

**Wanted: Thiokol Imp Snow Cat  
Call Jeff 973/997-5284**

## **Dustless Blasting**

**Eco-Friendly On-Site Blasting**

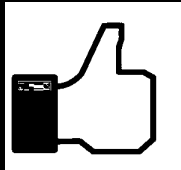
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