January 2011

# HIT & MISS

Journal of the Western Antique Power Associates

Tractor before removal from the reservation

Tractor awaiting restoration at Cal Poly

## JOHN DEERE "D" AT CAL POLY POMONA

**By Bob Smith**

Dan Hostetler has provided WAPA with books and information on some of their old tractors. Included is information regarding the John Deere D that we are currently restoring.

The tractor was donated to Cal Poly by Gilbert Stuart of Moreno Valley. Gilbert worked as a forester for the U.S. Department of the Interior, Bureau of Indian Affairs. In his travels on the twenty nine Indian reservations in Southern California, he spotted a John Deere on the Santa Rosa Indian Reservation that was almost grown over with brush. It had been sitting under a small oak tree for nearly forty years.

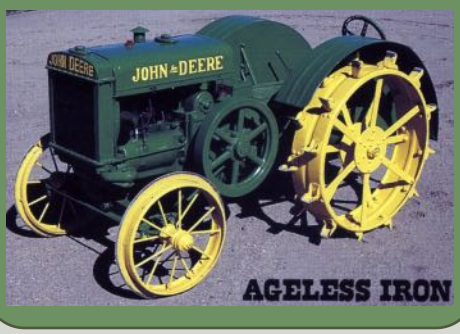
The engine was stuck, the tires almost rotted away, the hood and gas tank dented and someone cut off the rear fenders. Gil purchased the tractor from Shannon Modesto of the reservation for $250 in June, 1997.

Gil checked with Ed Miller of M.E. Miller Tire Co. about replacing the rotted away Allstate 12.75x32 rear tires. Both the front and rear rims are solid cast iron and are inscribed in the casting with "Kay Steel Tractor Wheel, Los Angeles." Ed said he has seen one other with these rims and he surmised John Deere had sent some tractors to California without wheels to be outfitted with wheels that were built locally. Gil never did get to restore the tractor.

In speaking with the archivist at John Deere, Gil learned that the tractor, serial number 114850, WAS built on October 15, 1931 and shipped on December 31, 1931 to Los Angeles, California. No data was available on the original purchaser or dealer. It is possible that the tractor was sold directly to the Santa Rosa Indian Reservation.

### AGELESS IRON TRADING CARD #5

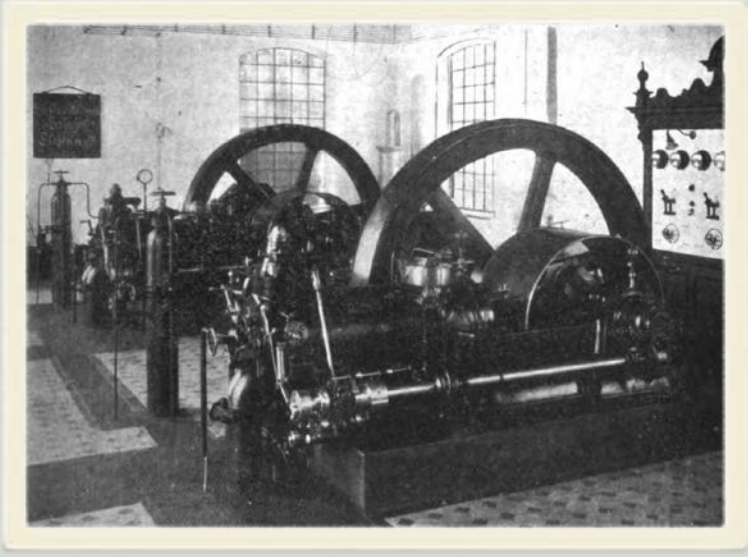
The venerable model D's horizontal, valve-in-head 2-cylinder engine originally spun a distinctive 26 inch spoked flywheel. In the early days of production the D's engine was rated at 15-27 horsepower while operating at 800 rpm., but the engine produced a maximum 28½ drawbar and 37 belt horsepower when tested! The original transmission offered two forward speeds of 2½ and 3½ mph. The model D went through many changes during its life, including receiving a streamlined hood, extended exhaust and air intake, electric starter and lights. The D's design remained simplistic and durable which laid the groundwork for the model A, which proved to be the most popular tractor in Deere's history.



# GAS ENGINES IN KONIGSHOF & KUSTRIN ELECTRIC STATIONS

**AN ARTICLE BY FRANK C. PERKINS, 1904**

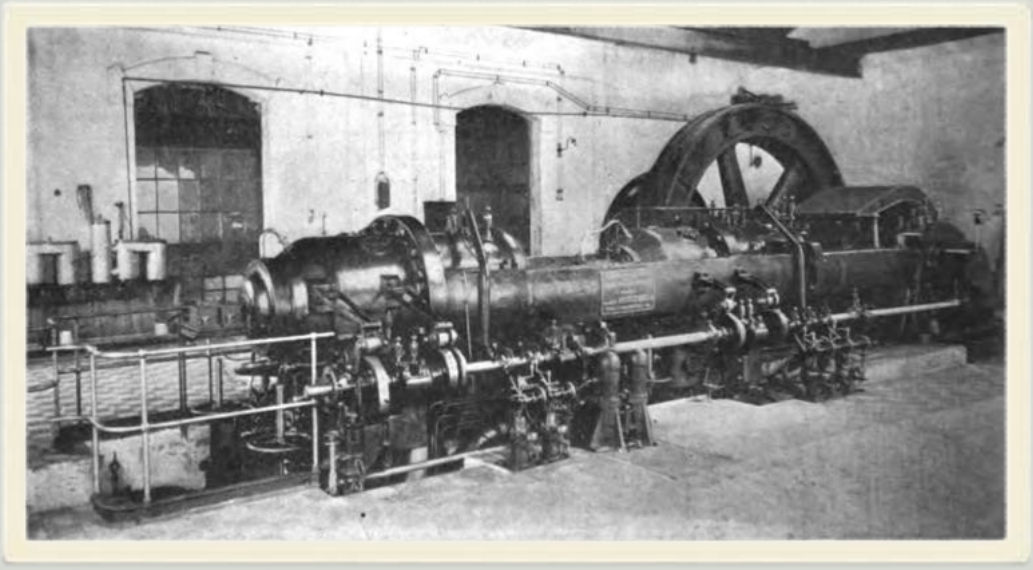
A large number of electric power and lighting stations in Germany and other European countries are equipped with gas engines varying in size up to 2000 h.p. each. Most of the engines are direct connected to electrical generators, both alternating and direct current, while in this country, until recently, the practice has been to drive the dynamos by belt transmission when gas engines have been employed. This practice has been changed during the past few years with the advent of the larger sizes of gas engines.



Even in the smaller units abroad, the direct connected units are most common, as seen in the photo of the light station at Kustrin. The plant supplies power for arc lighting at the Kustrin Bahnhof. The two units are 50 hp each, and operate at 190 rpm. Each generator supplies 160 amps at 220 volts. The engines are started with air pressure tanks, and consume approximately 410 liters of gas per horsepower per hour.

The engines are of the Otto cycle and were built by the Vereinigten Maschinenfabrik Augsburg Und Maschinenbaugensellschaft Nurnberg.

At the Konigshof Electric Plant there are two tandem gas engines driving direct current generators at 150 rpm. One engine, shown here, produces 300 horsepower. The cylinders bores are 700 mm and the stroke is 800 mm.



These engines are of the Otto Cycle and were constructed in Prag-Karolinenthal in Austria-Hungary, by the Maschinenbau-Actiengesellschaft.

This electric plant is fueled by the waste gases of blast furnaces. In addition to the two 300 hp engines at the Konigshof plant is a 600 hp unit that powers a blowing engine. The bore of this engine is 1300 mm, and the stroke is 1700 mm. It runs at 80 rpm.

Throughout Europe are many thousands of horsepower developed by gas engines for generating electric power and for running blast furnace blowers, all fueled by blast furnace gases.

Blast furnaces are great gas producers, and are capable of supplying in excess of 1000 horsepower for every 100 tons of pig iron manufactured. It is thought that cheap electric power can be supplied to large areas surrounding blast furnace plants, competing economically with hydroelectric plants.

The gas, as it comes from the blast furnace is best utilized after it is cooled and cleansed, as the dirt and dust is hard on the valve mechanisms of the gas engine. At the Differdigen plant, two fans, 1.5 meters in diameter and running at 900 rpm, are used with two one-inch water pipes to clean the gas. 12,000 cubic meters of gas are delivered per hour. Cleansing requires 90 horsepower to drive the fans and 40,000 pounds of water per hour. Prior to cleansing, the gas contains 3.5 grams of dust per cubic meter, and after cleansing, only 0.09 grams. The cleaning and cooling of gases is easily accomplished, and the resulting clean gases have no ill effects when used in the

# Upcoming Events

**January 8, Saturday**
**Fun Day at Larry Madole's**
**8:00 a.m. – 1:00 p.m.**

This is the annual WAPA Fun Day at Larry's Yard in Chino. The location is 6995 Edison Avenue, on the corner of Edison and Euclid.

Bring an engine to run, stuff to sell, and a pile of cash to buy everyone else's cool goods. Lunch will be served.

Check out Ron Haskell's flyer on the back page of the Hit & Miss.

**Board of Directors Meeting**
**January 14, 2nd Friday of the Month**
**7:00 p.m. – 9:00 p.m.**

The WAPA Board of Directors meeting is held at Heritage Park in Santa Fe Springs. All members are welcome and encouraged to attend. If you have ideas on how WAPA can become a better club, or if you just want to come and join in the festivities, please join us.

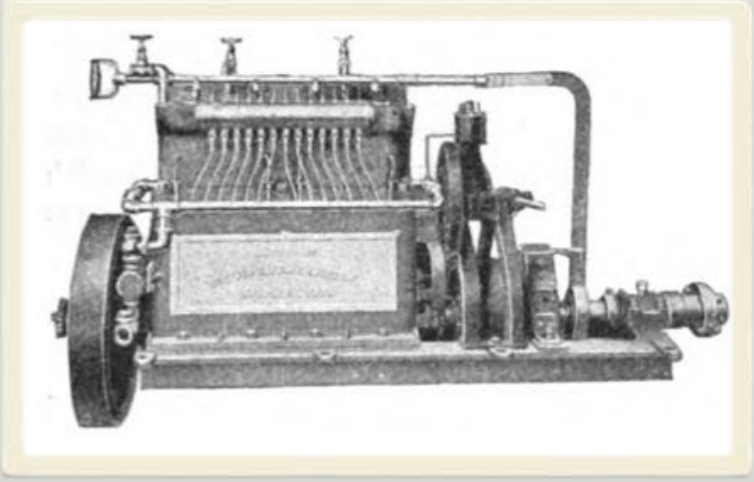
Heritage Park Rd. is located just south of Telegraph Road just west of Norwalk Boulevard. The meeting is held in the train depot next to the steam locomotive.

# Classified Ads!!!

**6 hp Fairbanks Morse Type Z on Cart $900**
**Monitor Pumpjack engine $1700**
**Hercules engine $900**
**Fairbanks Morse $400**
**Fairbanks Morse $600**
**Cream Separator $100**
**Tall Hand Pump $200**
**Pitcher Pump $70**
**Well Pump $90**
**Oilers $25 ea.**
**Washing Machine $150**
**3 Maytag engines**

**Located in Ontario**
**Call Darla Munsinger at 909-986-4341**

**The Hit & Miss is the monthly publication of the Western Antique Power Associates. Visit us at www.wapa.us.**



The Buffalo Gasoline Motor Company of Buffalo, New York, built marine engines ranging from two to forty horsepower.

These well-built engines used mechanically operated intake valves. Both the valves and head are water-jacketed.

All cams are operated off one shaft. The engine could be ordered with either make-and-break or jump-spark ignition.

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# Western Antique Power Associates

## Fun Day At Larry Madole's
## Gas Up, Swap, Auction, Food
## Saturday, January 8
## 8:00 a.m. to 1:00 p.m.

You are cordially invited to join the Western Antique Power Associates for our winter bash at Larry Madole's yard in Chino.

Bring an engine to show,
stuff you want to sell,
a shopping list of things
you want to buy,
your appetite,
or just come out
to have a good time.

Be there rain or shine -
Larry has indoor space.


6995 Edison Avenue, Chino
For more information,
visit us at www.wapa.us
S/W Corner of Edison & Euclid