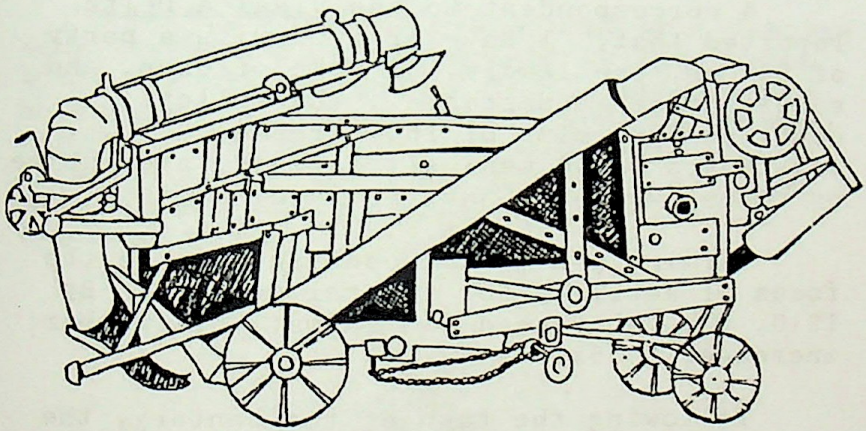
SELF-GUIDED TOUR
HISTORIC EQUIPMENT YARD



# Eastern California Museum

# Introduction

Initial exploration and settlement of the Owens Valley in the early 1860s led to a series of armed conflicts with the local Indian population. Following the forced removal of some of the valley's Indians to Fort Tejon, conflicts diminished, and settlement and mining exploration began in earnest.

A correspondent to the Visalia Delta reported that, "I have arrived with a party of 56 men, one family, 82 yoke of oxen, and saddle horse innumerable. The valley contains 52 claims of 160 acres each . . . Just heard of 40 men, all farmers, and twelve ox teams, who have just arrived."

Farming and mining continued to be the focus of activity for several decades. By 1910, the valley had 438 farms; this number increased to 521 by 1920.

Following the turn of the century, the City of Los Angeles began to acquire land. The Los Angeles Aqueduct was constructed 1908-1913 to transport the water from the Owens Valley to the City of Los Angeles.

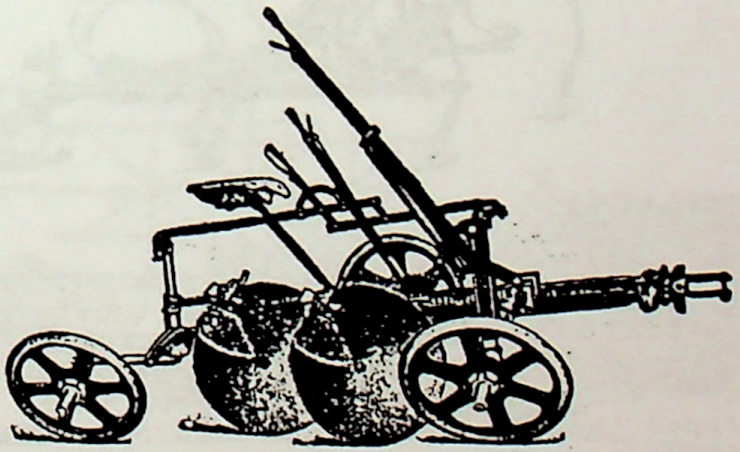
The exhibits you will see on this tour are the memories of that time of family farms, prospectors, and the massive construction project of the Los Angeles Aqueduct.

Within the Equipment Yard, and around the outside perimeter, are assorted implements and machinery, reminders of the once intense farming, ranching and mining industries of Inyo County.

Your tour begins with the horse-drawn machinery of the farming era.

1. PLOWS

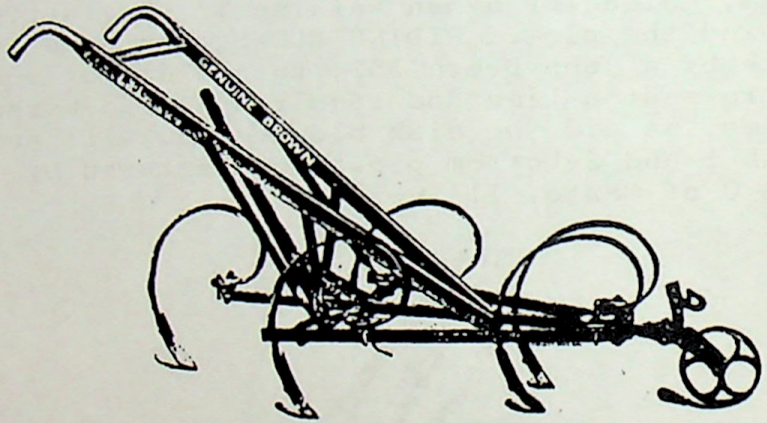
The WALKING PLOW was pulled by a 2-horse team, guided by a man walking in the furrow behind the plow. RIDING PLOWS, represented here by a John Deere 352, turned one or more furrows at a time and required 4 or 5-horse teams, as did the disk plows. You will see both 1 and 2-bottom plows manufactured by P & O of Canto, Illinois.



2. CULTIVATORS

HARROWS were used to prepare the soil for planting. There are examples of DISK HARROWS, SPRING, SPIKE and FLAIL HARROWS as well as a ROLLER or CLOD CRUSHER.

CULTIVATORS are implements used to control weeds in new row crops. Sets of CULTIVATOR DISKS or small, double-shared SHOVEL ATTACHMENTS built mounds around row-crops to preserve moisture, as well as to help control excessive weed growth.

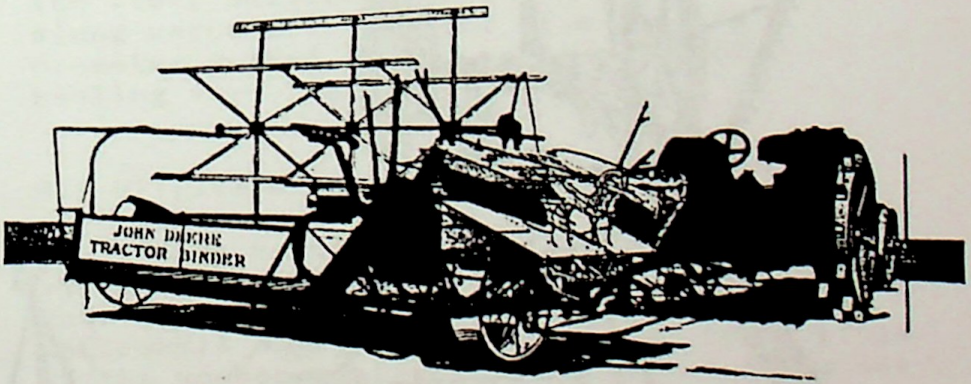



3. PLANTERS

POTATO PLANTERS opened a furrow, dropped in the cut potato, then covered the furrow. CORN PLANTERS dropped seed corn at regulated intervals. The space was controlled by chain-driven gears or by a knotted rope that tripped the seed release mechanism. GRAIN DRILLS dropped wheat or oat seed through multiple spouts, while a trailing chain harrow covered the seed. A MONITOR brand grain drill can be examined for the various features mentioned.

4. HARVESTERS

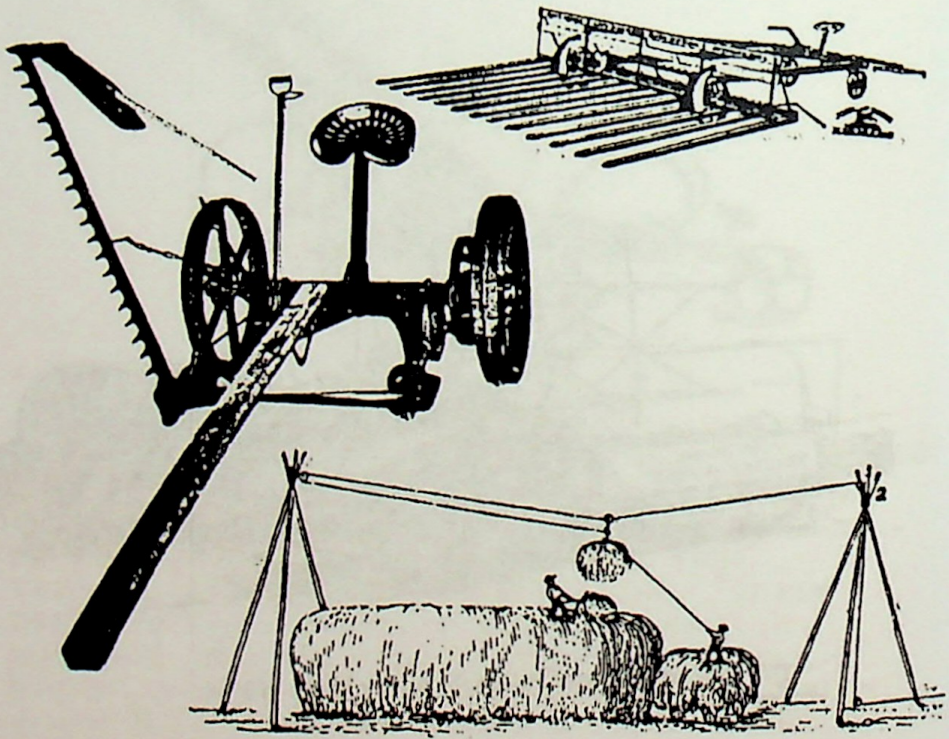
GRAIN BINDERS (International Harvester-Deering Ideal) were pulled through standing grain crops. The cut stalks fell onto a moving canvas conveyor, where they were bound into bundles with twine and dropped to the ground. CORN BINDERS operated in a similar fashion, cutting one row of stalks at a time. The ears of corn were later removed from the stalks and corn shellers were used to remove the kernels. POTATO DIGGERS (see item 11).




This 1937 advertisement offers the tractor binder in 8' as well as 10' size

5. HAY RAKES 6. HAY FORKS

The RIDING MOWERS (Oliver, John Deere, International Harvester and McCormick-Deering) were pulled by a team of 2 horses. Gearing in the wheel hub powered the mechanical sickle. One mower sickle bar is locked upright for travel. HAY FORKS with wheels were pulled through the mowed grass of hay, collecting large piles that were then hauled to the stacking areas. HAY RAKES piled the cut hay and grass into windrows to dry. The cured hay was forked by hand onto racks or wagons. Smaller hay forks on cables were used to lift the hay onto outdoor stacks or into barn haymows.



7. HAY BALER

The John Deere HAY BALER was powered by a belt, driven by a gasoline engine tractor. Hay balers picked up and compacted hay or grass. Two men tied the bale with wire before it was ejected.

Note: Discarded baling wire was standard mending material on farms and ranches. Much of the equipment on display has been reinforced with baling wire.

8. HEAVY WAGONS

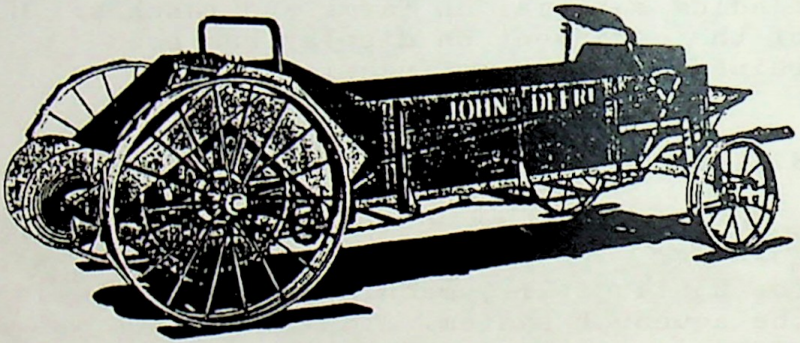
The heavy wagons were used by the City of Los Angeles, Department of Water and Power, for hauling pipe, machinery and materials for the aqueduct system. The DUMP WAGON was made of heavy planking and has two levers to open the floor sections for unloading. A low-slung wagon with a wheel of a smaller diameter worked like a modern LOW-BOY, hauling very heavy loads.

9. UTILITY WAGONS

These wagons hauled freight, produce and anything that could be loaded onto the wagon bed. The wagon with the elevated seat is a CALIFORNIA RACK, on other styles, the springs of the wooden seat rest directly on the sides of the wagons.

10. MANURE SPREADER

Manure from horses, cows, pigs and chickens was utilized. The MANURE SPREADER had a moving chain made of metal rods and a system of disks and spikes that pulverized the manure and spread it onto the soil as the wagon moved over the field.

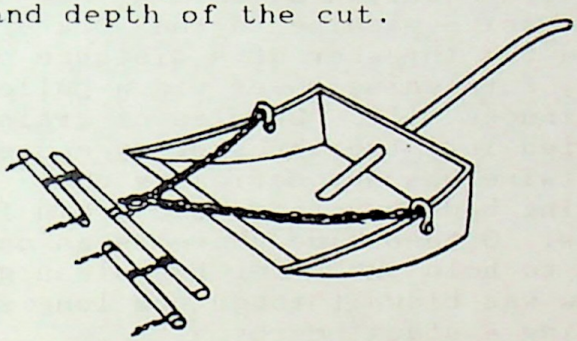



11. POTATO DIGGER

POTATO DIGGERS harvested the root crop by digging into the ground with a wide metal blade, routing the earth and potatoes over a metal rod conveyor, leaving the potatoes on the surface to be picked up by hand. The two potato diggers on display were powered by 1) a gasoline engine, and 2) by the POWER TAKE-OFF (P.T.O.) on a tractor.

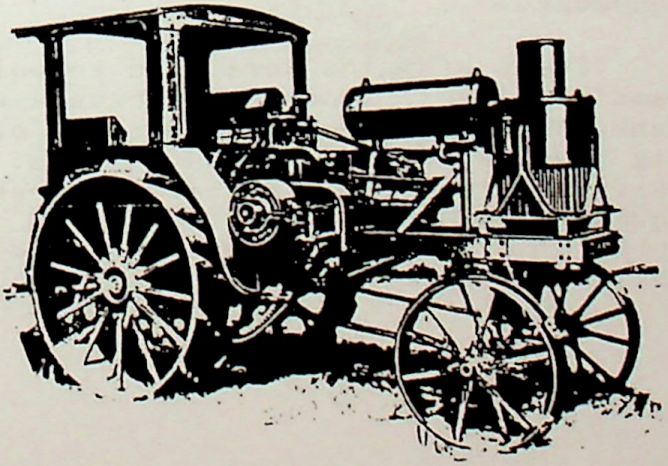
## 12. EARTHMOVERS

SLIPS, small scoops with 2 handles, were operated by one man with a 2-horse team. FRESNO SCRAPERS moved more dirt than slips. One man drove the team, while a second man guided and dumped the heavy scoop. HEAVY PLOWS were used to break up compacted soil. GRADERS moved variable amounts of earth. Rears and levers adjusted the blade, varying the slope and depth of the cut.



## 13. FARM TRACTORS

Gasoline engines gradually replaced horse-powered implements. The gasoline era is well represented by the small FORDSON tractor with metal wheels and the much larger MODEL 30/60 (Avery Company) tractor with an opposed cylinder engine and free-standing radiator.



## 14. THRESHING MACHINE

The Russell threshing machine (pictured on the front of the brochure) is in a compact traveling configuration. A tractor pulled the massive machine to the work area, then faced the thresher at a distance of about 50 feet, furnishing power via a pulley driven continuous belt. Bundles of grain were carried into the thresher by conveyor, where the twine was automatically cut. Beaters and shaking beds separated the grain from the straw. On one side there is an opening with rods to hold sacks for the clean grain. Straw was blown through the long spout, forming a stack nearby.

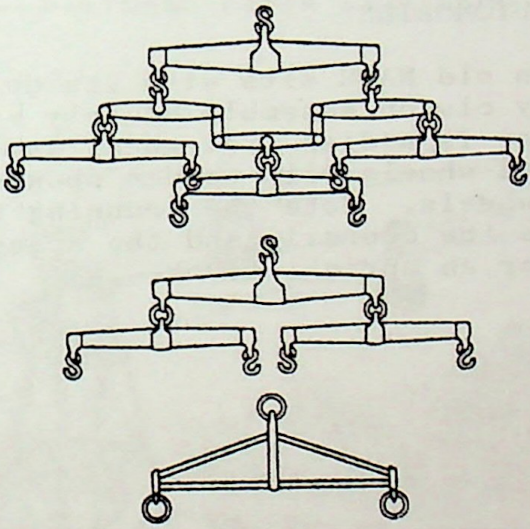
## 15. D.W.P. EQUIPMENT

The City of Los Angeles, Department of Water and Power used the equipment in this area in the construction of the Los Angeles Aqueduct.

Teams of mules were used to pull these massive wagons. One wagon holds a water tank, others could carry sections of pipe, big timbers or similar heavy loads. Cement carts were used to line certain sections of aqueduct with concrete.

## 16. HORSE-DRAWN EQUIPMENT

Horses pulled by leaning into their collars, horse-power being transmitted through the TUGS or TRACES to SINGLE-TREES and WHIPPLE-TREES. Chains from HAMES to the collar held up and controlled the wagon tongue, determining direction. Each horse or mule was hitched to a single-tree. Two sets of whipple-trees hang on the yard fence; one with metal parts for heavy construction hauling, the other perhaps for a lead team on a freight wagon. Farm wagons used lighter versions.



## 17. MANUFACTURING/PRODUCTION

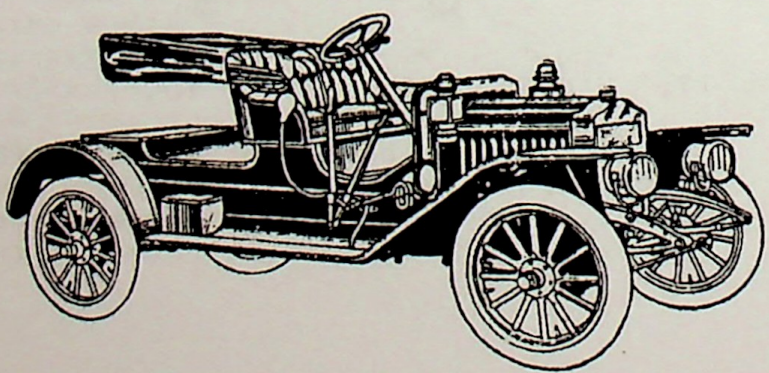
Incomplete power units lie on the ground; pulleys, gears, shafts to power drills, saws, etc. Pulley size controlled speed. Water pumps illustrate design types.

18. GAS PUMPS

The "horseless carriage" required imported supplies. Gasoline may have been hauled in metal barrels. Gas pumps lie on the ground. The square, upright tank has a hand pump to dispense oil at a garage or gas station. The three-legged device removed "split-rim" tires from wheel rims.

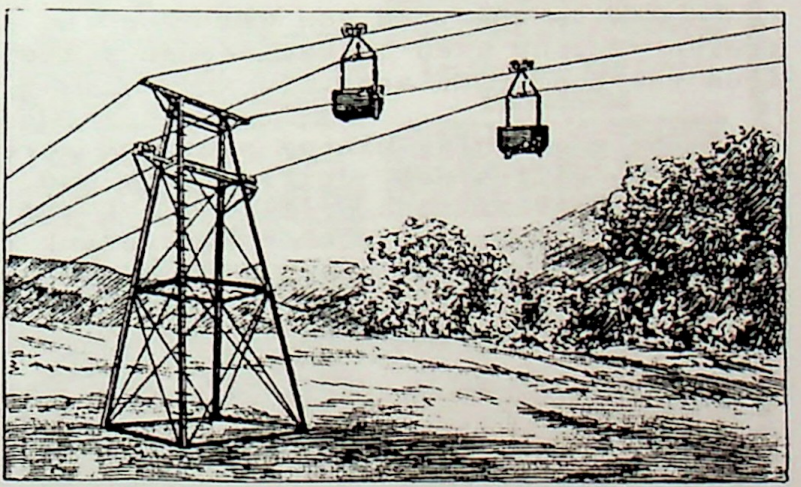
19. AUTOMOBILE

An old NASH sits with its drive train and dry clutch assembly clearly visible. At the rear is a disk type wheel and tire. Some cars had wheels with wooden spokes similar to wagon wheels. Note the "running boards" outside the doorsill and the space at the rear for an upright trunk.



20. TRAM BUCKETS

TRAM BUCKETS of different types carried ore from remote mines such as salt from Saline Valley. Trams ran on systems of cables and pulleys, much like ski-lifts. Some of the cars tripped and emptied automatically. There are 2 types of TRAM BUCKETS on display: a "U" shaped metal bucket and a cylindrical bucket with a "clam-shell" cover. The apparatus for attaching the tram cars to the overhead cable lies near the fence.



MISCELLANEOUS EQUIPMENT

Located in the yard you will see such machines as a CORN SHELLER, GRAIN SEPARATOR, and a FEED CUTTER made by Dick's Agricultural Works. There are also wooden and metal wagon wheels, wagon tongues with whipple and single-trees attached. There are FORGE BOXES, and a variety of equipment to test your mechanical knowledge.

Outside the yard you will see the large freight wagons used by Remi Nadeau, freighter from the Lone Pine area.

There are also mining ore cars, ore buckets, drill steel, drill stands and several types of rock drills. Look for the Jackson Drill Driver with a hand-crank to rotate the steel and another to advance the steel. You will also see hoist winches and various related mining equipment.

# Farm Economy demands the use of a HART-PARR TRACTOR

## Do Your Work Cheaper, Quicker, Better

Farming with a gas tractor in the Northwest is rapidly being recognized as true economy, the saving of time — the ability to do quickly what would require many horses — or in fact, be impossible with horses — the advantage of having ample power at all times, for all purposes — the expense stopping just as soon as the work is finished, makes the ownership of a kerosene tractor true farm economy — you cannot farm right or get the maximum profit from your farm unless you do the work with a tractor.

### Big Saving in Spring

The farmers owning tractors at this time of the year are especially fortunate. With the immense amount of spring work to be done, the man with a gas tractor need not worry. Plowing, disking, seeding, etc., is easy with a tractor. The Hart-Parr farming tractor just eats up this work—plows 25 acres a day—plows, discs and seeds 15 acres a day, when through shut off the power and the operating expense stops right there. It enables you to do this work just when it should be done—when weather conditions are favorable—it enables you to do a lot of work in a short time which is just what you need in the spring.

### Pays for Itself in Two or Three Years

You can give a Hart-Parr tractor all the work you now give to horses—and some things you can't do with horses—not only will the work be done quicker and better, but cheaper—this saving will pay for a tractor in one, two or three years, according to the amount of work you have to do. You also want to bear in mind that when your work is done you can earn several hundred dollars doing work for your neighbors. Write us for special information as to what Hart-Parr owners have accomplished along this line.

### The Modern Farm Horse

The Hart-Parr tractor has been named "THE MODERN FARM HORSE," because it is the original kerosene tractor—there are many "MODERN FARM HORSES" in use than all other makes of gas tractors combined. Not only is the Hart-Parr tractor the most economical, practical and popular gas tractor, but its advantages over the steam tractor are many. There is nothing you can do with a steam tractor that cannot be done as well or better with the "MODERN FARM HORSE." Then you eliminate the expensive licensed engineers, no fire-box danger—no firing an hour or two before hand—start right up any time. The Hart-Parr Tractor represents the highest efficiency in tractors, at the lowest possible cost, due to our immense output, enabling us to build tractors at a lower cost than any other builder of gas tractors.

### Burns Low Price Kerosene

This is an important item. It makes all the difference in the world to you whether you burn kerosene at 6 to 10 cents per gallon or gasoline at 12c to 18c. The Hart-Parr tractor is designed to burn kerosene (it burns gasoline equally as well), thus the operating expense is reduced as low as possible. This saving stays in your pocket. With this cheap kerosene our engine develops the same power and runs just as clean as with gasoline. By the use of kerosene for fuel we reduce your fuel bill one-third to one-half.

### Let Us Send You Free Information

We'd like to show readers of NORTHWEST FARMSTEAD who are farming 360 acres or more how they can make more money by farming with a tractor. We have studied the tractor proposition for over eight years. We have information that will interest you and be valuable to you. This information is free for the asking—we want to get together with you on this tractor proposition. Asking for this information does not in any way obligate you to buy. Just drop us a line today—a postal will do.

**Hart-Parr Company**
**248 Lawler Street**
**Charles City Iowa**