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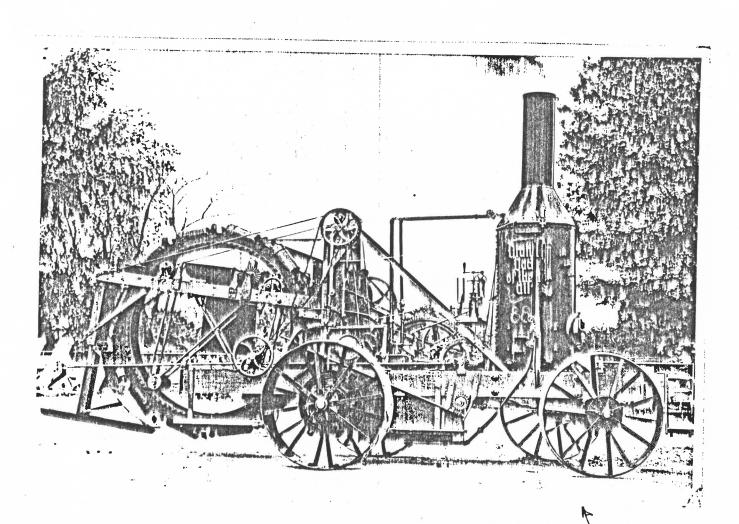
# Historic The same of the sa Findlay, Ohio

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### INTERNATIONAL HISTORIC MECHANICAL ENGINEERING LANDMARK



**BUCKEYE STEAM TRACTION DITCHER** 

Hancock Historical Museum Association Findlay, Ohio August 5, 1988 -NWO HAS NEGATIVE



James B. Hill was born November 29, 1856 in Fremont, Ohio. Mr. Hill's work on a farm made him realize the need of a practical way to place underground drain tile in the field and in 1893 while in Bowling Green, Ohio, made the first successful steam driven tractor ditcher. Patent No. 523,790 for the ditcher was issued July 31, 1894.

Mr. Hill, his wife and seven children moved for brief stays in Deshler and Carey, Ohio. Ditchers were made in both locations. In 1902 Mr. Hill and family moved to Findlay, Ohio. There the ditcher was made by Heck Van Buren and Marvin Company whose name was changed in 1906 to the "Buckeye Traction Ditcher Company".

The "Buckeye Traction Ditcher Company" continued to develop and build ditchers of many sizes that were shipped all over the United States of American and Canada as well as to many foreign countries.

Mr. Hill continued his development work on the traction drive system and in 1907 received Patent No. 866,647 for a "traction apron" that is known today as the "catapillar tread".

The Buckeye Traction Ditcher is currently manufactured by "Ohio Locomotive Crane Company, Bucyrus, Ohio".

In 1908 Mr. Hill moved to Raceland, Louisiana where as a farmer he developed seed corn known as "Hill's White Cob" and "Yellow Dent" which was sold in South America as well as many parts of the United States.

Mr. Hill continued development work for components of the modern tank and equipment used in draining swamp lands in Louisiana.

Mr. Hill died in Raceland, Louisiana September 25, 1945 and is buried in Maple Grove Cemetary, Findlay, Ohio.

#### OPERATION OF THE BUCKEYE STEAM DITCHER

The Buckeye Steam Traction Ditcher was orginally disigned to dig ditches so as to lay agricultural drainage tile. However, it served equally well to open trenches for any pipeline to be placed underground or for developing open drainage ditches. It was reported in 1920 that the State of Ohio alone had approximately 25,000 miles of open drainage ditches.

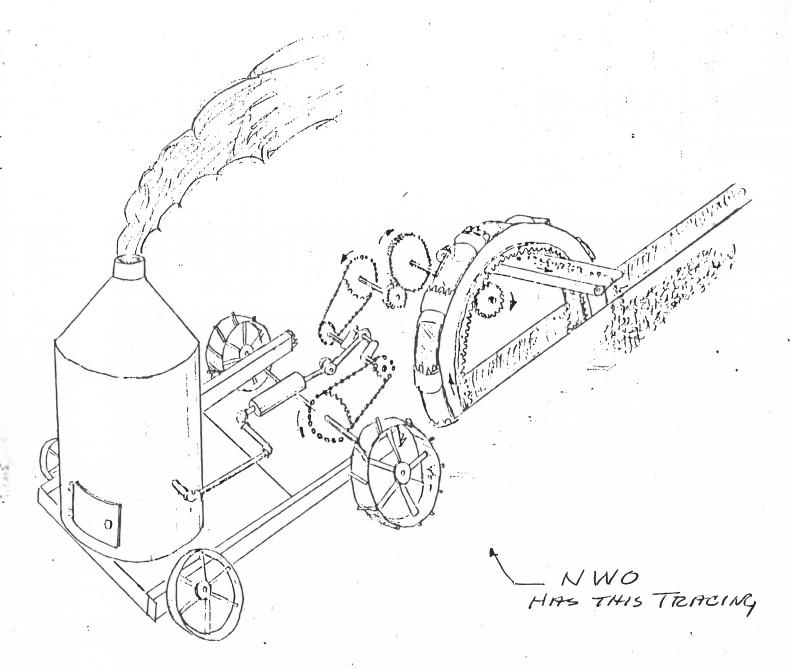
In the construction of any ditch, it is required to know the ditch direction, the desired depth and the grade of the ditch. Once the Buckeye Steam Ditcher was properly "steamed" and aligned, the digging wheel was engaged to rotate, the ditching machine moves forward and the digging wheel was gradually lowered so as to dig its way down to the desired depth. At this point a following support shoe was set and locked in place behind the digging wheel and the cables supporting the back end of the wheel frame were slackened.

The dirt scooped by the digging buckets was carried toward the top of the digging wheel, dumped out of the bucket onto a cross belt conveyor and carried away from the digging wheel to be piled along one side of the trench.

The proper grade was maintained by sighting over previously set height targets and adjusting the height of the pivot support at the front of the <u>digging</u> wheel.

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Schematic

#### **BUCKEYE STEAM TRACTION DITCHER**



#### INTERNATIONAL LANDMARKS

Cooperative Fuel Research Engine, Waukesha, WI Holt Caterpillar Track-Type Tractor, Stockton, CA 100-Inch Telescope, Mount Wilson, Pasadena, CA Edison Experimental Recording Phonograph, West Orange, NJ Le Creusot Steam Hammer, Creusot, France Rotating-Arm Model--Test Facility, Hoboken, NJ Steam Turbine Yacht Turbinia, Newcastle-upon-Tyne, England The Newcomen Steam-Atmospheric Engine, Dartmouth, England FMC Continuous Rotary Pressure Sterilizer, Santa Clara, CA Corning Ribbon Machine, Corning, NY FMC Whole Juice Extractor, Lakeland, FL Shoreside Container Handling Crane, San Francisco, CA Owens Automatic "AR" Bottle Machine, Toledo, OH Nuclear Steamship "Savannah", Charleston, SC Xerography, Columbus, Ohio IBM 3500 Random Access Control (RAMAC), San Jose, CA SS Great Briton, Bristol, England Hot and Cold Isostatic Processing (HIP) Battelle Lab. Columbus, OH

LANDMARK AWARDS
FOR 86 & 87 &88
TO BE ADDED



#### LEGEND

- 1. Airport
- 2. Blanchard Valley Hospital
- 3. Chamber of Commerce
- 4. Cooper Tire Company
- 5. Eastman Kodak Company
- 6. Fairground
- 7. Findlay College
- 8. Hancock Historical Museum
- 9. Holiday Inn
- 10. Marathon Oil Company
- 11. Werk-Brau
- 12. SAUSSER STEEL (FORMER GARWOOD PLANT)

#### HISTORY OF HANCOCK HISTORICAL MUSEUM ASSOCIATION

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MAUNEE VALLEY HISTORICAL SOCIETY

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