

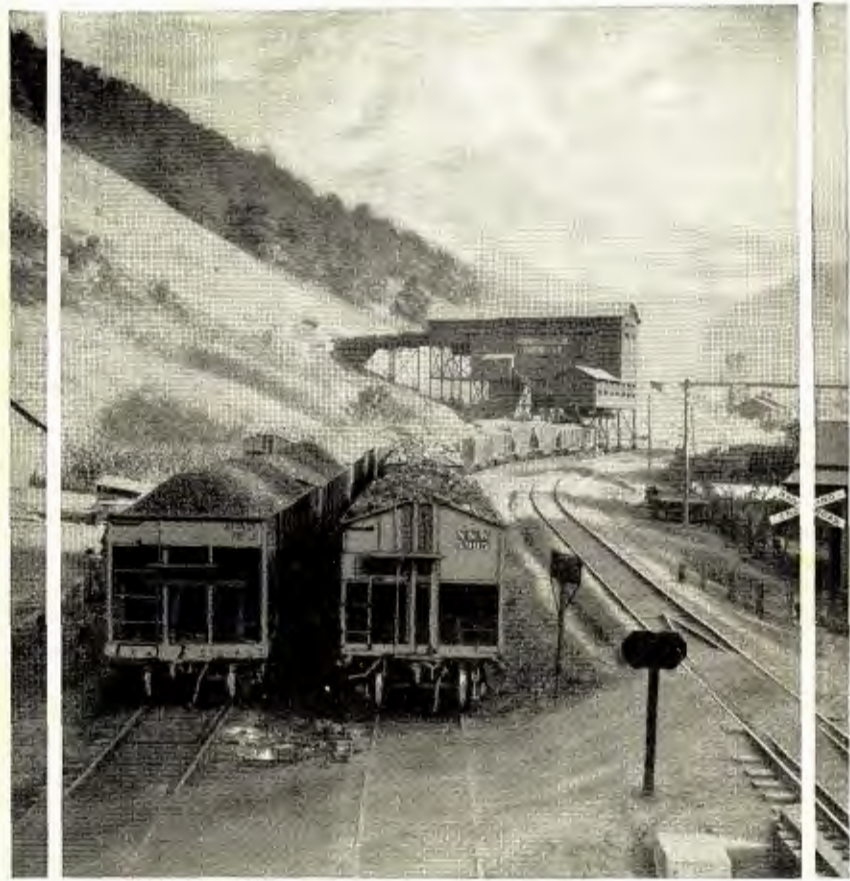
COAL of the highest quality obtainable; continuity of supply insured in every possible manner; complete marketing facilities; these the Ford interests have secured for themselves and now offer them generally to coal buyers.

Consult your coal dealer. He can easily furnish you Ford Coal.

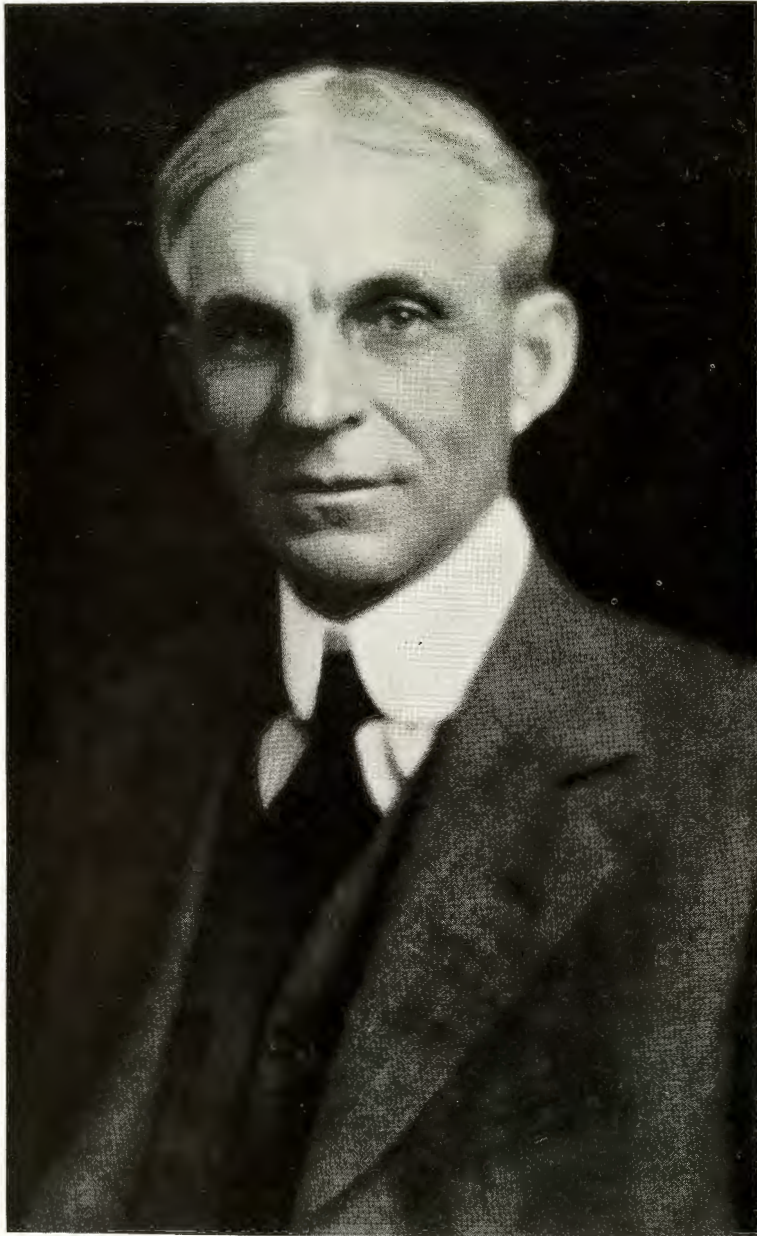


Ford Coal

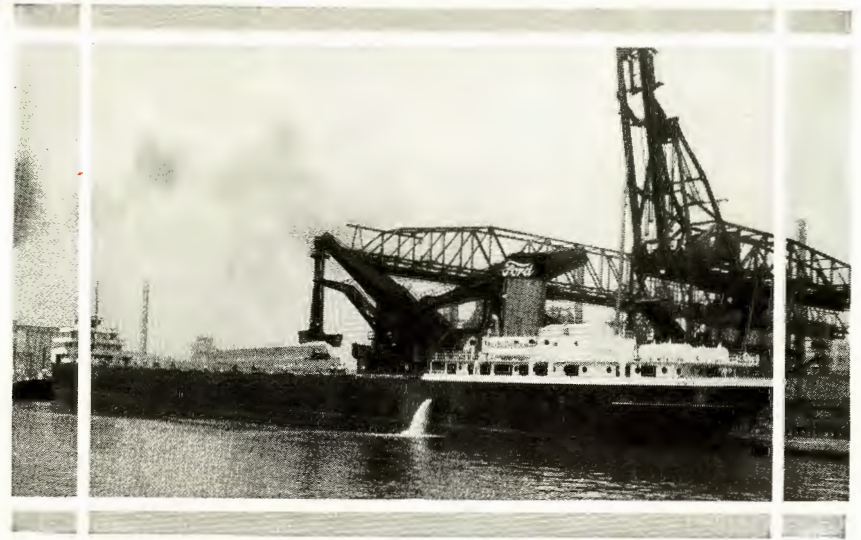
FROM MINES TO MARKET



Ford Motor Company



MR. HENRY FORD



Motorship Benson Ford Unloading Iron Ore at the Fordson Plant Ore Dock

IN the manufacture of Ford cars, many cycles from raw materials to finished parts are completed entirely within the organization or control of the Ford Motor Company.

Not the least extensive or interesting of these cycles is the production of iron and steel, which cycle includes iron ore mining, operation of blast furnaces, maintenance of transportation facilities, and production of metallurgical coke.

The last mentioned operation led the Ford Motor Company into coal mining, coal transporting, and coal marketing—the phase of its activities with which this booklet briefly deals.

When the Ford Motor Company began manufacturing its own iron direct from the ore, it also started making



Club House and Employees' Homes, Stone, Kentucky. A Reconstructed Coal Mining Village, Pond Creek Operation, Showing Ideal Living Conditions

its own coke, which gave a new importance to its coal supply. The practice of buying coal on the open market soon became unsatisfactory. Price fluctuations proved costly and the supply of coal was periodically threatened by car shortages and labor trouble. In the latter part of 1922 it was necessary for the Company to temporarily suspend operations due to its inability to secure coal at any price.

Aside from price fluctuations, a wide variation in the quality of the coal and the resultant coke and by-products furnished a continual source of difficulties.

These and other considerations led the Ford Motor Company to buy and develop coal properties which would yield a quality of coal best suited to its requirements



Wallins Creek Seam and Coal Cutting Machine, Interior of Coal Mine, Banner Fork Operation

and guarantee a continuous source of supply for many years. The first coal property acquired was the Banner Fork Coal Corporation at Wallins Creek, Kentucky, with a daily output of 3,000 tons of high volatile, by-product coking coal and an estimated reserve of 8,000,000 tons.

Various other properties were acquired including the Pond Creek Coal Company at Stone, Kentucky, the largest of the Company's operating coal mines, with a daily output of 7,000 tons and an estimated reserve of 180,000,000 tons, reached through eleven openings and worked by more than 1,500 men. Another reserve of 120,000 acres, wooded with approximately 700,000,000 feet of virgin timber and underlaid by an undeveloped coal deposit of approximately 400,000,000 tons, has since



Cars of Coal Leaving Mine for Tipple, Mine No. 1, Banner Fork Operation

come into the possession of the Ford Motor Company and will play its part in furnishing transportation of various sorts to future generations.

Since acquiring these properties, the Ford interests increased their equipment by the purchase of 1,000 steel coal cars, a railroad connecting the roads in the coal fields with the Great Lakes, several Great Lake Freighters to add to their fleet of coal, lumber, and ore carriers, and a coal dock at Duluth to take care economically of a portion of the prepared sizes of coal not used by the Ford Motor Company.

We find the coal mines yielding their production in West Virginia and Kentucky, at the same time the iron ore mines in the Lake Superior District are producing iron ore. The coal is brought by rail to Toledo, loaded in



Shaker Screen for Grading Coal. Lump, Egg, Stove or Nut, and Slack Are Separated Here

Ford freighters, transported both to the Ford Motor Company's Plant at Fordson, Michigan, and to the Company's docks at Duluth. Thence the freighters start their return voyage, picking up iron ore from Northern Minnesota and Michigan, or lumber as a return cargo for the Fordson Plant and then begin the cycle again at Toledo.

When the coal properties were acquired, they were immediately raised to that high degree of ordered maintenance noticeable throughout all of the Company's properties. All the necessary improvements and equipment, roads, power facilities, and last but perhaps most important, suitable living conditions, commissaries, and recreation buildings for the miners were installed. In addition to the physical improvements, the Ford wage scale was put into effect and a sufficient tonnage of coal



Ford Coal in Ford Coal Cars on D. T. & I. (Ford Owned) Railroad. Portion of the Equipment Utilized in the Marketing of Ford Coal

Pond Creek Coal

Freeburn Seam, Stone, Pike County, Kentucky
 Uses: By-products, domestic, steam, malleables

Characteristic analysis:

Volatile Matter	34.00%
Fixed Carbon	60.00
Ash	6.00
Sulphur50
B. T. U.'s	14,000

Banner Fork Coal

Wallins Creek Seam, Kentenia, Harlan Co., Kentucky
 Uses: By-products, domestic, steam, malleables

Characteristic analysis:

Volatile Matter	38.60%
Fixed Carbon	57.40
Ash	4.00
Sulphur70
B. T. U.'s	14,200



Motorship Henry Ford II and Ford Coal on Company's Dock, Duluth, Minnesota. This Boat and her Companion Ship, the Benson Ford Transported More Than 1,500,000 Tons of Raw Materials on the Great Lakes Between April 15 and December 18, 1925



Coal on Loading Boom at Tipple; a Final Inspection and Utmost Care Against Breakage Is Given Coal in Loading

was produced from the start to give continuous labor, eight hours a day, to the miners.

These alterations in the properties and living conditions as well as the increase in wages and the steadiness of occupation render outside interference, labor trouble, and the proverbial ills of coal mining communities relatively unknown. One is immediately aware that he has entered the property of the Ford interests when he steps across the line dividing the Ford mining camps and villages from adjoining properties.

Incidentally, all of the foregoing influences on the life of the miner have their direct effect upon production. Happy, healthy miners dig more coal. Men who work in clean and, above all, safe surroundings at a satisfactory wage, secure in the knowledge that their families are

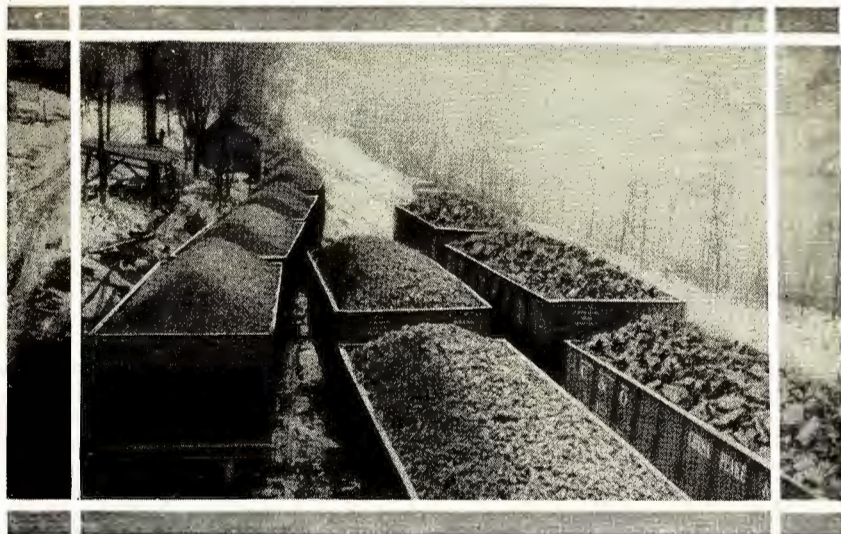


Cars of Coal Being Loaded at Tipple. Several Preparations of Banner Fork Coal Are Shown

living in cleanliness and their children are receiving an adequate education, change their employment infrequently. Consequently, the dependability of the Ford Motor Company coal supply has been insured at the source insofar as it is possible to insure anything which depends upon the human element.

Before purchasing the coal properties, many exhaustive tests to determine the quality of the coal and the extent of the reserve were made and only such properties were bought as were known to contain the highest quality of by-product and steam coal available.

After the operation of these coal properties had begun, it was found that, in order to mine coal at the most economical figure and to insure steady employment for the miners, a tonnage about double that required by the



Coal Awaiting Shipment. Preparation, Left to Right: Nut and Slack, Egg, Lump

Ford Motor Company for its own uses must be mined and shipped. This led the Company into the marketing of coal through its various branches whereby coal dealers are now enabled to make their purchases without the delays and annoyances incident to long distance correspondence.

The same factors which insure the continuity of supply and quality to the Ford Motor Company are available to a limited number of purchasers of coal. Foresighted coal dealers throughout the country have availed themselves of this opportunity to buy a uniform, high quality coal from a company which controls both the supply and production, thus assuring their customers the same security and dependability of supply as that which the Ford Motor Company acquired for its own protection.



Kentucky Coal Country; Lower Mining Camp at Pond Creek Operation, Stone, Kentucky

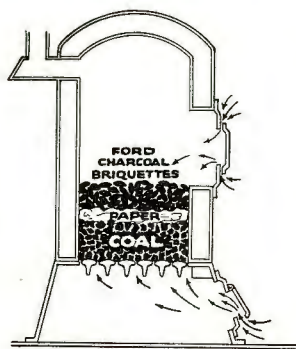


Kentucky Coal Country; Cable Railway and Tipple, Banner Fork Operation, Kentenia, Kentucky

Firing Data

Steam Boilers

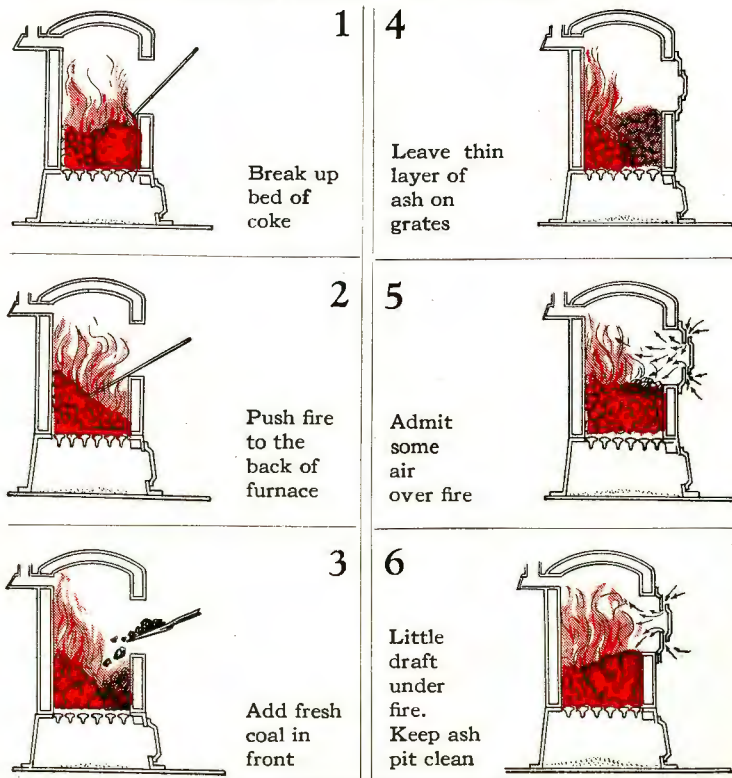
Start
this
way



Place four or five inches of coal on grates and cover with **FORD CHARCOAL BRIQUETTES** or kindling. Leave bottom draft and stack damper open until coal is well ignited. Leave slide in fire door open. This method ignites coal gradually from top with minimum amount of smoke.

Then:

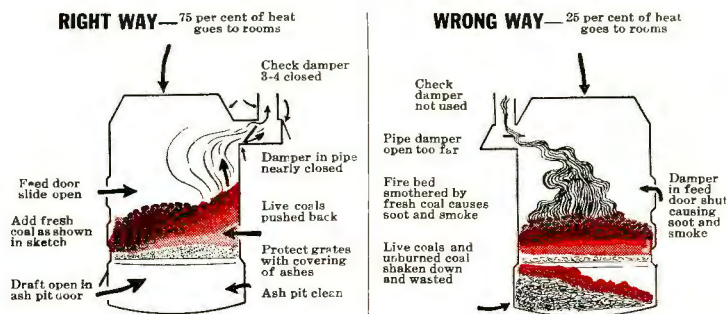
The Coking Method of Firing



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Firing Data

Hot Air Furnaces



- 1—Clean furnace well before starting fire. Keep flues and ash pit clean. Stop all leaks thus providing proper draft.
- 2—In cold weather, carry a thick bed of fire and a thin layer of ash on grate. In warm weather, leave thick layer of ash on grate and hold a thin bed of fire.
- 3—When adding fresh coal to fire, close draft and check damper and open pipe damper wide. Push live coals to the back before adding fuel.
- 4—Add fresh coal to the front, as shown in sketch. Leave portion of hot fuel from previous firing exposed. This will burn the gas from the fresh coal thus giving more heat and less smoke.
- 5—Leave feed door slide open after firing until coal is glowing without smoke. Usually one-quarter hour is long enough. Then partly shut slide.
- 6—To bank fire for night, fire in method outlined (4) above. Close pipe damper and open check damper. Open feed door damper and close draft in ash pit door.
- 7—To start fire burning brightly in morning, close check damper, open pipe damper, and draft in ash pit door, and break coked fire with bar, adding no fuel until house is sufficiently warm or fire burned through.
- 8—Use Ford Coal for economy. Egg and stove sizes are best suited for furnaces, cook stoves, and hot water heaters.

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