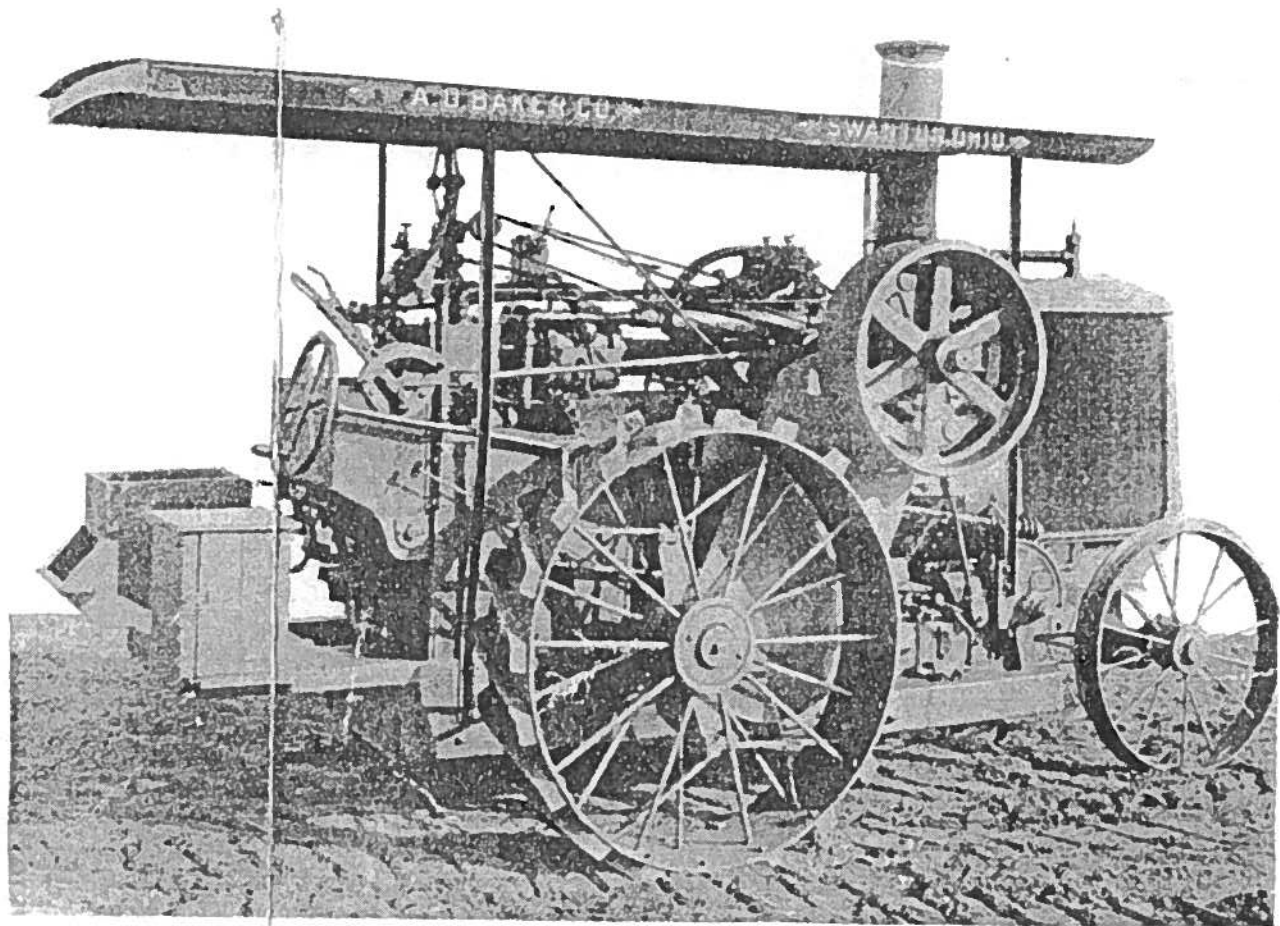
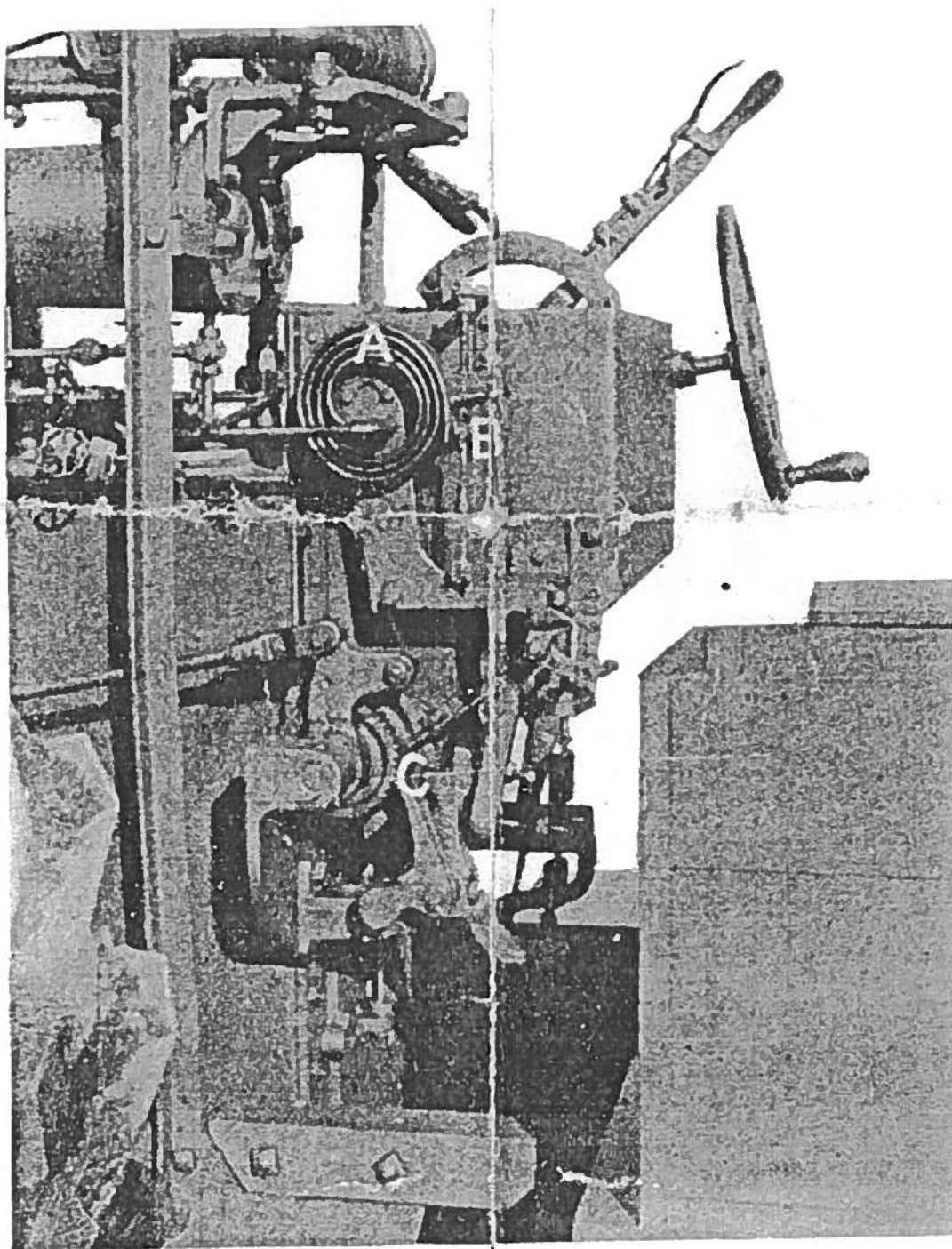


This view shows "The Baker's" radiator-type condenser, one of the many features making for greatest simplicity of operation. The steam passes from the cylinders to this unit, is cooled and condensed by the fan, and, now in the form of water, flows by gravity to the supply tank from where it is pumped back into the boiler to be used over and over again. The condenser has a capacity greater than the brake rating of the tractor.



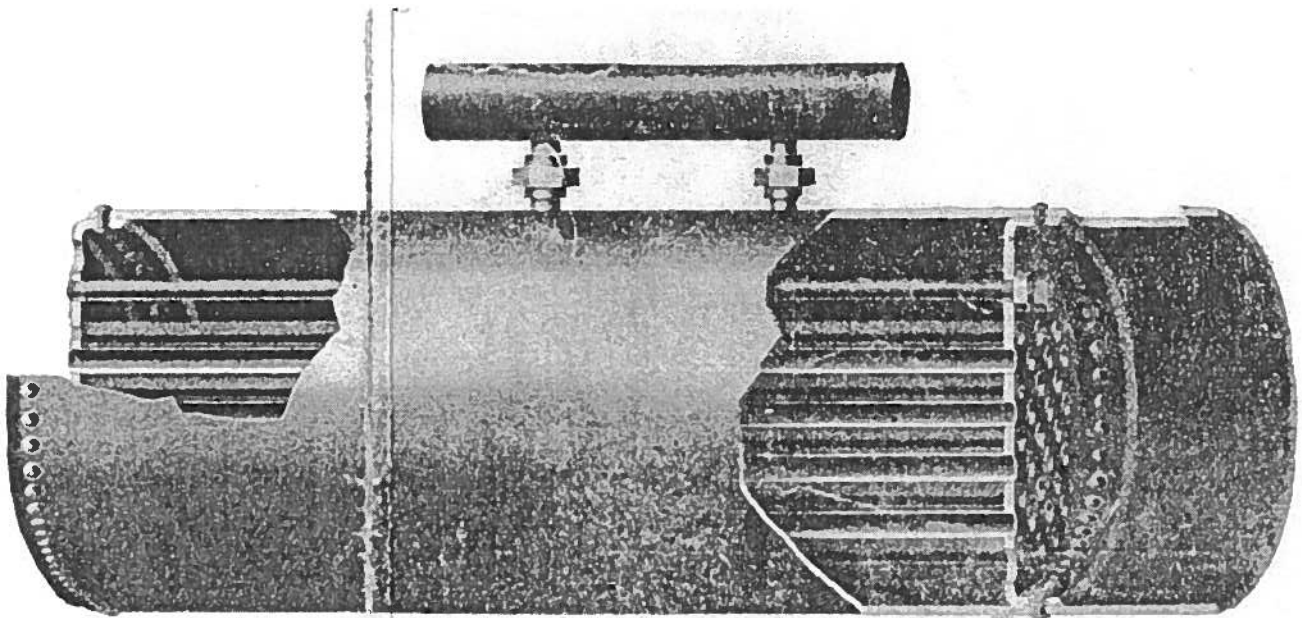
Half of the tractor work is belt work. The position and size of the pulley are important factors. "The Baker's" large 32x10-in. pulley is conveniently located on the right-hand side, directly in front of the operator's seat. It has ample clearance and is in the proper position to insure quick line-up with the machine to be operated. Its generous size prevents slipping and insures transmission of ample power for heavy jobs.



## STOKER CONTROL

Coil A is similar in principle to the coil in a steam gauge—it expands under pressure. Steam pressure can be carried at any point desired by the adjustment of length of arm joined to B and when pressure reaches that point, expansion of coil disengages dog in ratchet wheel C, stopping feed of coal. Slightest downward movement of steam pressure contracts coil, causing coal again to be spread over grate surface.

“The Baker’s” hopper, or fuel-box, is located directly over the fire-box. When engine is in operation fuel is fed automatically, by the stoker, onto the grates, evenly and better than is



**Plain shell A. S. M. E. Ohio Standard Boiler of heavy material and of the safest, most simple construction possible.**

**Refer to specifications for details.**

## Boiler Water Level Control

The exhaust steam is condensed and delivered to a pump which in turn forces this water back into the boiler. It will be seen that the water will be returned in quantities at all times equal to the amount leaving the boiler in the form of steam, less leakage, which is very small. The pump has two independent plungers driven by a single crank. One plunger returns the water from condenser to boiler and the other pumps the water direct from tank to boiler when needed. Tractor is also equipped with a U. S. Injector for delivering water to boiler when engine is not running.

## Tremendous Power

"The Baker" is a tandem compound double acting engine, the type most desirable for use with 300 pounds steam pressure; first, because it makes it possible to get as high as 15 expansions of the steam, utilizing its maximum expansive force; and secondly, because it reduces the temperature of the steam so it can be readily condensed.

While the tractor is given a 20 horsepower at the draw bar and 40 horsepower on the belt, the engine is good for 60 belt horsepower "in a pinch." This shows its flexibility and reserve power.

## Does a Big Day's Work for \$1.75

"The Baker" is a sensation in power economy. One quart of oil is all that is required for 10 hours lubrication. The total cost for fuel and oil for a day's operation averages only \$1.75, figuring coal at \$4.00 a ton. Compare this with the oil and fuel consumption of any other tractor! Think of the saving.

This almost unheard-of fuel and oil economy, ease of operation, marked ability to do big jobs quickly and easily, low upkeep expense, freedom from bothersome features common to tractors of other types resulting from the use of spark plugs, gear shifts, carburetor, magneto and elimination of cranking, noise and vibration, makes "The Baker" the most attractive power investment ever placed on the market.

If you are interested in economy and efficiency you will want to see "The Baker" and learn more about it.

## Meets the Usual Drawbar and Belt Demand

Pulls three to four 14-inch plows; operates 30 to 32-inch separator; runs ensilage cutters; shells the corn; pulls the binder; in fact, meets every farm's demand for power, at a new low cost for fuel and oil.

In addition to adaptability to all kinds of power "The Baker" is simple to operate and to keep in tip-top shape.

Any owner will be able to grasp the construction and functioning of each unit and make the few adjustments which may be necessary from time to time.

Beyond this, "The Baker" provides additional economy in giving its owner the long life of a steam engine. A minimum of vibration and the elimination of many moving parts pave the way for continued service over a long period of years, with little expense for repairs. The common practice of buying a new tractor every few years will end where "The Baker" steps in to do the work.

designed tandem compound steam engine using a high degree of superheat and equipped with a condenser and automatic coal feed.

## Built for Real Work

In "The Baker's" construction every effort has been directed to bring about greatest simplicity, rugged durability, flexibility and economy.

## Burns Cheap Slack Coal ---And Not Very Much

For fuel "The Baker" requires only the cheapest coal—ordinary slack, available any place for a few dollars a ton. 700 lbs. of good slack will provide ample steam for a day's work under ordinary conditions.

In case fine coal is not available, lump coal may be used by passing it through the coal crusher located over coal box, into which the crushed coal falls.

## Has Patented Automatic Fuel Feed.

"The Baker" has a fuel-box, which holds 175 pounds of fuel. The fuel can be placed in this compartment easily, and once in, requires no further attention. It is fed automatically into the fire-box as needed, leaving the operator free to attend to other work.

## Has Steam Condensing Unit

An important feature is a steam-condensing unit. This unit makes it possible to use the water over and over again with only nominal waste. With it, the tractor, developing its rated horsepower, will require less than 50 gallons of water per day, the capacity of the supply tank.

The automatic fuel feed and the condensing unit on "The Baker" place all other types of tractors on an unequal footing in convenience and simplicity of operation.

## Separation of Oil from Feed Water

Exhaust steam and oil pass through the condenser and the hot water and oil are delivered to a specially arranged tank oil separator, which is equipped with an automatic valve, which keeps the tank nearly full of water at all times. Water is drawn from the bottom of the tank. The oil naturally floats on top of the water and is drawn off every two or three days.

# The Only Tractor with All of These Advantages

Adapted to every phase of farm and road work.

Average operating cost only  $\frac{1}{4}$  of that of other types.

Burns cheap slack coal. Under ordinary conditions 700 pounds is enough for a day's work.

Average operating cost for fuel and lubrication is only \$1.75 per day.

One quart of cylinder oil lasts 10 hours under ordinary conditions.

Easy to operate. Fuel taken care of automatically.

Great reserve power on both drawbar and belt insures additional power when needed.

Simple. Expert skill not required to operate it. Owners will be able to make few adjustments which may be necessary from time to time. No big repair bills.

Combines the dependability, flexibility and economy of steam with the utility of other types of tractors.

Guaranteed against defects in material and workmanship by The A. D. Baker Company, Swanton, Ohio, for 25 years a leading figure in the development of steam farm power machinery.

## Specifications

Width: 6 ft.  $2\frac{1}{2}$  in.

Height to top of stack: 9 ft. 5 in.

Wheelbase: 8 ft. 2 in.

Turning radius: 15 ft.

Weight: 13,300 lbs.

Plows recommended: Three to four 14-in.

Size thresher recommended: 32-in. cylinder.

Traction members: Four wheels; drive wheels, 54-in. diameter; 14-in. face.

Horsepower rating: 20-40.

Engine: Tandem compound; high-pressure cylinder,  $5\frac{1}{2}$ x8 in.; low pressure cylinder,  $9\frac{1}{4}$ x8 in.; speed, 275 to 300.

Pulley: 32-in. diameter, 10-in. face.

Lubrication: Oil pump for cylinders.

Clutch with counter-balanced friction shoes.

Final drive: Integral gear drive to live rear axle.

Shafting: Crank, 3-in. dia.; countershaft, 3-in. diameter; rear axle,  $3\frac{1}{4}$ -in. diameter.

Bearings: Large; special grade babbitt.

Frame: 6-in. channel with  $3/16$ x12-in. reinforcing plate on side; all joints electrically welded.

Rear axle: Revolving type in large cannon bearing with removable bushings.

Front axle: Automobile type.

Boiler: Fire tube, 26-in. diameter; 74 tubes,  $1\frac{1}{2}$ x11-ga. x 5 ft. long; 156 sq. ft. heating surface; 300 lb. working pressure, A. S. M. E. standard.

Fuel: Slack coal; hopper capacity, 175 lb. Automatic stoker.

Water tank: Capacity, 50 gal. Located between sides of frame under boiler.

Condenser: Tubular radiator type.

Pumps: Two, driven from crank shaft through pinion and spur gear.

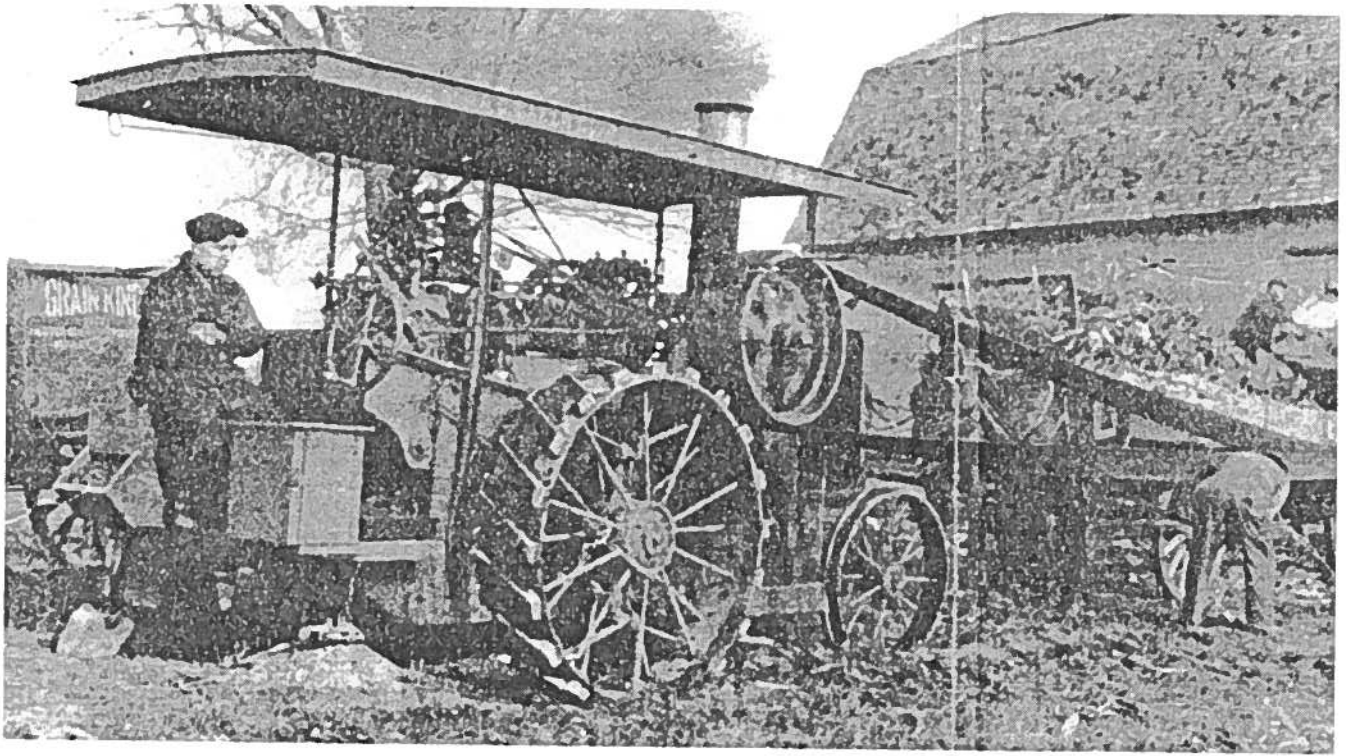
Water level: Controlled semi-automatically.

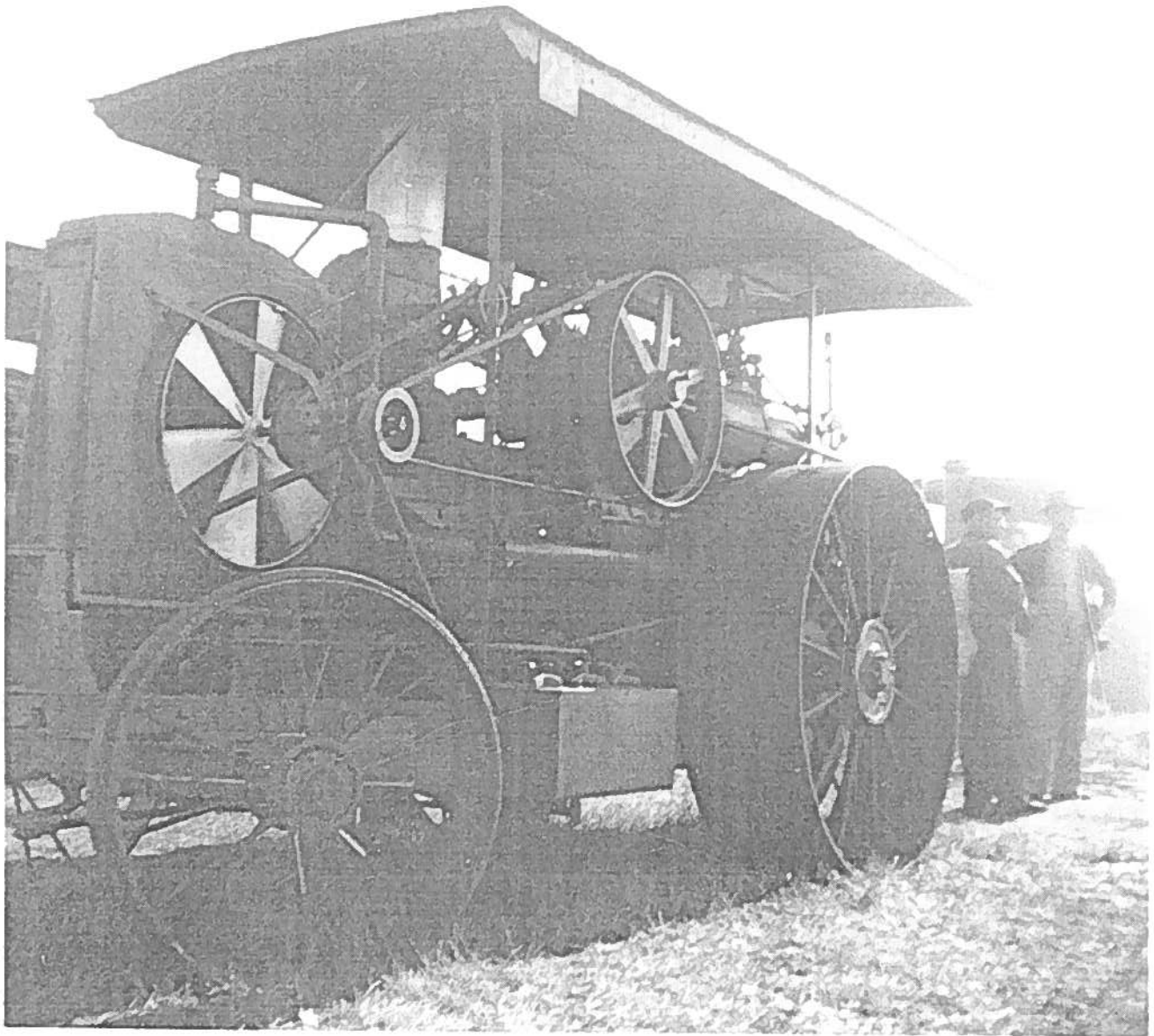
Ground clearance: 11 in.

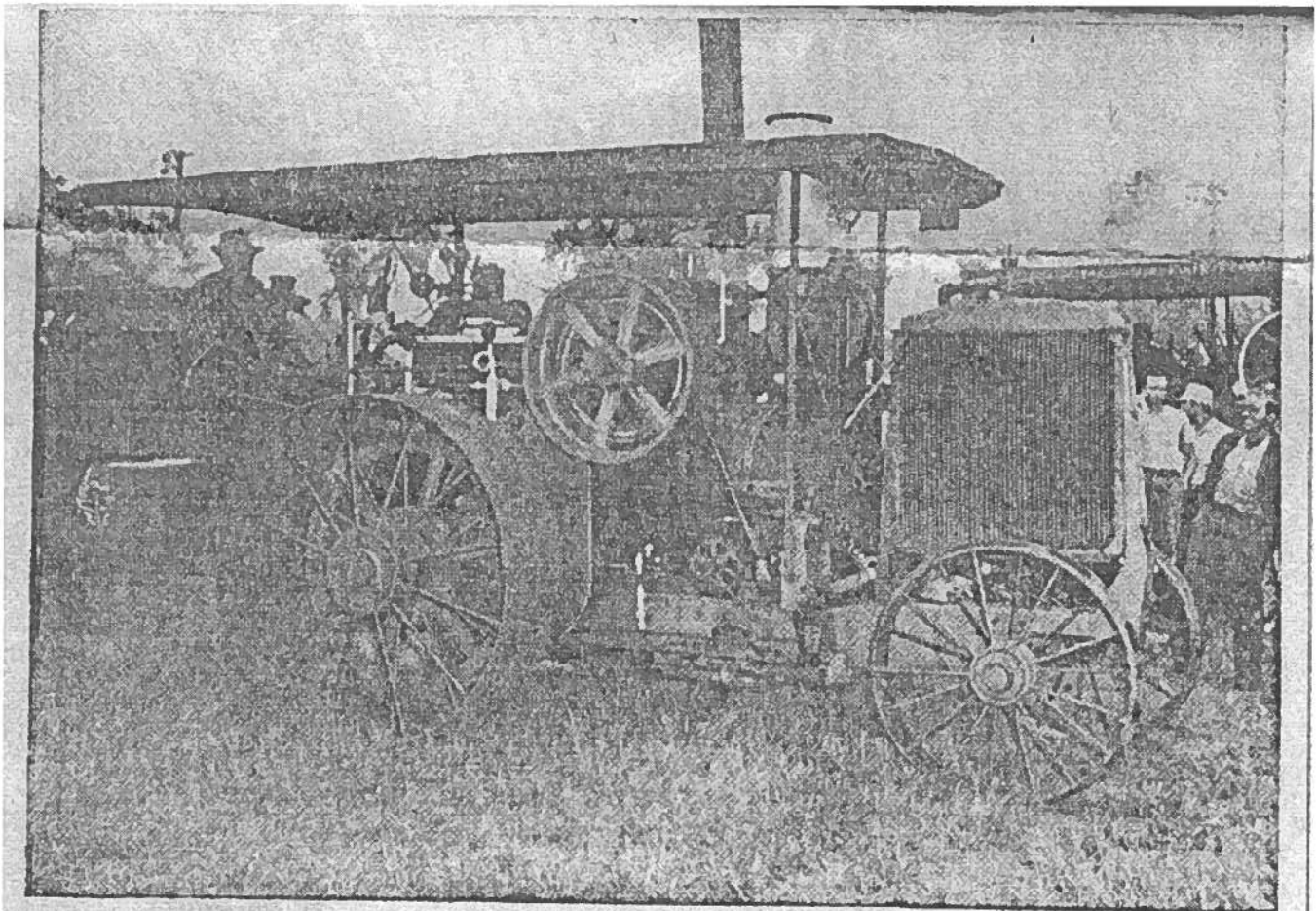
Speed: Snail's pace to  $2\frac{1}{4}$  miles per hour.

Governor: Pickering.









Only steam tractor of its kind in existence is the claim of the Murphy Brothers of Millington, Mich., who brought their 20-40 Baker to the NTA convention this year. This marks the first time that the Murphys have attended an NTA event.

The tractor apparently was an unsuccessful venture on the part of the Baker Co., who added

the condenser in front to condense the water and feed it back in an effort to equip the tractor with its own water supply.

The Murphys, incidentally, bought the tractor new. It was patented in 1924.

A smaller version stands in the Ford Museum, Detroit. (Leader Enterprise Photo)