

### Volume XVIII

## May 2022

**ISSUE No. 5** 

With a couple of nice days already behind us I'm sure some have already had their T's out shaking off the winter cobwebs and stretching their legs, so let's see some pictures! Feel free to send in pictures of your T's out and about, taking a rest in the front yard, or maybe even in the midst of a bit of "tinkering". ..... Someone was out enjoying a bit of "rural Rhode Island" last weekend.







Model T owners were tinkerers.

Heard about town. Or Upcoming events.

Just a reminder on Friday and Saturday

These events in from Marty:

Just got word, the <u>Empty Bowl</u> is being held on <u>Friday night April,29th</u>, at <u>4 to 7.</u> Parish Hill High School. There is a lot of people that go so get there at 4:30. Or sooner.

The next day, April 30, is the trip to the **UP** and **Down Saw Mill**. Will meet in Baltic in the little parking lot across from Cumberland gas station at 10am and leave at 10:30 **Sharp!** 

You can take your new car or the old. But don't forget the **LUNCH** on the kitchen table.

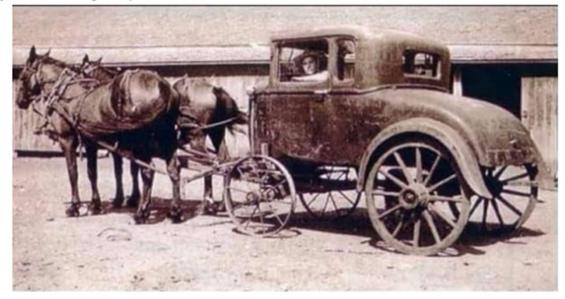
This may be a bit far for most of us, but the brass era enthusiasts may be interested in a get together. HCCA National Pre-1916 Brass Era Car Tour starts May 15<sup>th</sup> with a Pre-1916 car display and Brass Era Flea Market

> Time: <u>May 15, 2022</u> from 8am to 3pm Location: <u>Gettysburg Outlet Shops</u> Street: **Just Off Of Rte 15** City/Town: **Gettysburg, PA** Phone: **717-383-0360CA**



Presidents report: May 2022.

It is May already. The sun is hi and warm can you believe that ! As I right this, the weather man said it's going to be in the 20's. Some of you can't wait to get on the move like [I should not say who this is driving But she is raring to go as you can see.] I hope she has water for the horses ?



### Happy Easter !! Yes it is Easter Season already.

It was great to see so many of you at the ELKS breakfast and then again at our Meeting at Johns.

The weather is on our side now, and we have some events coming up. Hope you can participate in a lot of them.

Jim brought a new, young, prospective member to the meeting. Positive thinking. Let's keep this club thriving.

All the snowbirds should be back by now. Looking forward to seeing you at the next event.

See you at Belltown???? There are still openings for items to trade, sell, give-away or needed in our "Horse Trading Days"

Jack



As a new addition to the monthly newsletter we (Jack's idea) will be offering a "for sale" section where members can offer up their excess T inventory, T parts and I suppose we might be able to expand it to "T-need" too. If anyone has something for sale, horse trade or needs a part they can contact Jack or myself and we will do our best to include it in the next newsletter.

Harold Bishop still has the following excess inventory of parts that are believed to be for a TT. He is asking Best Reasonable Offer, and for now inquiring calls can be made to Jack at (860) 818-0672

TT wheels, a Warford transmission and a TT rear end.





# **CHAMBERLIN MILL NEWS**



#### April 2022 News

## An unexpected find!

We have recently acquired a rare Muzzy shingle machine identical to one that was used in Chamberlin Mill before water power was lost in the 1930s. The mid-19th century machine is in excellent condition, and will be an important artifact for telling the story of Chamberlin Mill. For more detail, see our website. (link per below).

## Volunteers Ahoy!

We appreciate the response to our last newsletter's request for volunteers, and once again invite volunteers to come forward with skills (or just friendly untrained support) to aid Chamberlin Mill, Inc. in its preservation and educational efforts. There is a wide range of possibilities, including marketing, computer skills, writing, property maintenance, cataloguing and archiving, historical research, fundraising, and event support. We can train volunteers.

## And what is happening with the saw-engine connection?

While we are not yet producing sawdust, some of us have had the pleasure of seeing the sawblade turn. Do stay tuned!

## Website has been recently updated. Take a look to see what has been happening!

https://www.chamberlinmill.org/

Continuing to share some excerpts from this early "Cyclopedia"..... I think it is an interesting perspective from the time when the Model T Ford was truly cutting edge technology and just starting to roll out of the factory as the latest in modern technology.

# Cyclopedia of Engineering

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light and of high speed—of motors long used for stationary work, it will not be necessary to include here so complete a description as would otherwise be the case, since this information can be obtained in text books treating directly of the motor.

#### THE MOTOR

The theory of the gasolene motor is that a mixture of air and gasolene vapor is drawn into the cylinder of an engine and ignited, after which the pressure, due to the expansion, is caused to perform work in propelling the vehicle. The essential parts are the *cylinder*,

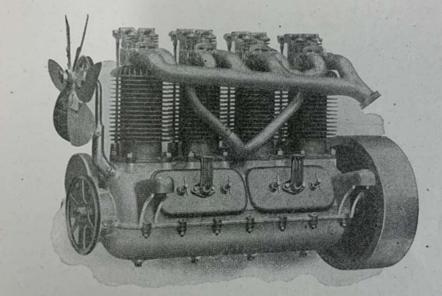


Fig.9. Four-Cylinder Gasolene Engine.

piston, crank shaft, fly wheel, inlet and exhaust devices, ignition arrangement, vaporizer, and means of control, together with important incidentals, such as lubrication and means for cooling.

Cylinder. The cylinder of the engine for auto use is usually from three to six inches bore, with stroke sometimes longer, sometimes shorter, but quite generally the same as the bore. Cast iron is the usual material from which the cylinders are made, and provision for cooling, such as a water jacket, is usually cast integral with the cylinder, although quite frequently affixed in the form of a sheet metal jacket or fins after the cylinder is machined. These cylinders may be attached to

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the crank case or formed with part or all of the crank case in one piece. Each method of construction has its followers and each has its advantages, according to the design of motor, crank shaft and similar parts. In motors of the type first used on DeDion tricycles, the flywheels were disks enclosed in the crank case and forming the crank sides, and since they practically filled the crank case, it was necessary that this be made in separable halves. The separation was in the plane of the crank rotation, which permitted each half of the case with its long, hardened and lapped but nonadjustable bearing, to be removed by sliding off opposite ends of the crank shaft. The cylinder was held to this case after the halves had been brought together, by screws or bolts. In many instances the head of the cylinder was held against the cylinder end by the same bolts, so that the cylinder was actually clamped between the head and the case. This design employed a cylinder open at each end, making a quite simple casting and facilitating machining.

Other cylinders are built with a simple head screwed in position, and with the ports on the sides of the cylinder instead of forming part of the head. Air-cooled cylinders are most frequently provided with circular flanges spaced one to three times their thickness apart, and rising above the cylinder wall from two to ten times their own thickness. In some cases these flanges are of sheet metal of great conductivity, as copper, forced tightly upon the smooth wall of the cylinder, or they are of smaller pieces attached by calking, clamping or other effective form of contact in or to the cylinder wall. It is essential for good results, that the cylinder should be true, particularly when hot, for if it is not truly round, and practically parallel throughout its length, the piston rings will not fit, and will not retain the gases which, leaking past the piston, leave their heat in the cylinder walls, blow away and burn up the lubricating oil, and cause excessive heating, pounding, loss of power, premature ignition and even cutting of the metal surfaces, destroying both piston and cylinder.

Valve Ports. The most common arrangement of the ports employs a pocket or passage at one side of the cylinder head in which the valves and frequently the sparking parts are placed. The exhaust valve is the nearest the crank shaft, with its stem extending toward the crank shaft where it is conveniently operated upon by the cam on the half time shaft which lifts the valve every second revolution,

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as is required in a four cycle engine. The inlet valve is placed with its stem in the same axial line but projecting in the opposite direction, and is held closed by a spring and opens by the suction of the piston. By this arrangement the cool incoming charge strikes the exhaust valve and sparker parts and much reduces the temperature. Burnt gases are carried out of the pocket, leaving a fresh combustible mixture therein which contributes to certain ignition.

Recent designs have employed double cam shafts on opposite sides of the motor with valve pockets likewise on opposite sides, the inlet valve being mechanically opened, and arranged the same as the exhaust valve. These double pockets increase the wall of the compression space and therefore the loss of heat, and lessen the economy.

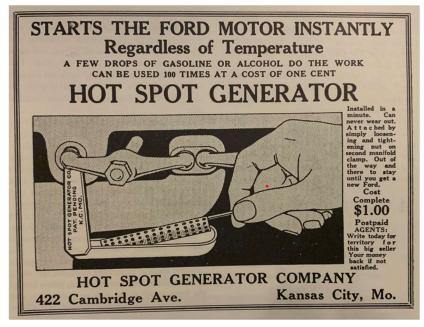
To avoid this increased wall surface of the compression space, many constructors now place the valves in the head of the cylinder with their stems projecting away from the crank shaft, and operate the valve by rocker arms, or place the cam shaft beyond the cylinder head and drive it by chain and sprockets instead of gears.

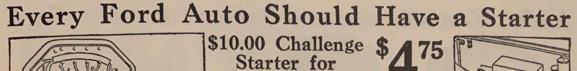
Whatever the form of cylinder and fittings, it is essential that there be good compression, or, in other words, that the contents of the cylinder be not allowed to escape. To test the compression, turn the engine by hand until the piston comes against the contained gases as against a strong spring, and judge by the length of time that this resistance continues as to the rapidity of the escape. A tight cylinder properly lubricated ought to resist a pull on the starting crank for a minute or more and should require considerable effort to force the engine past the compression. The operator should distinguish between high compression and good compression. If the clearance at the head of the cylinder on the compression dead center is small, the engine is known as "high compression" and if turned quickly, the resistance will be high, even though the valves or piston rings may be leaking and the compression therefore not good.

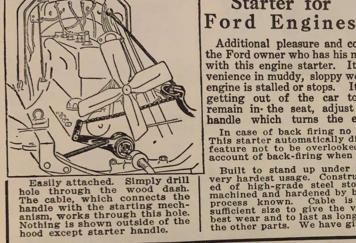
Faulty Compression. If the compression is faulty the escaping gas can usually be heard, announcing its escape by hissing. The point of escape must then be found and will usually be at the exhaust valve, for the inlet valve, being kept cool by the incoming charge, seldom needs attention. If the passages can be opened, a candle flame will, by its flickering, indicate the leak, to remedy which the valve must be removed and ground. Grinding a valve consists in oscillating it upon

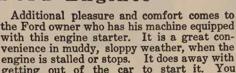


And everyone needs the latest accessories for their T's!









with this engine starter. It is a great con-venience in muddy, sloppy weather, when the engine is stalled or stops. It does away with getting out of the car to start it. You remain in the seat, adjust the speed lever and pull the starting handle which turns the engine over and starts the motor. In case of back firing no damage will result to car or operator. This starter automatically disconnects when the motor back-fires, a feature not to be overlooked, as a great many accidents occur on account of back-firing when the motor is cranked the old way.

Built to stand up under the very hardest usage. Construct-ed of high-grade steel stock; machined and hardened by best process known. Cable is of sufficient size to give the very best wear and to last as long as the other parts. We have given

I can't even begin to think of what it would be like to "pull start" a model T!