

The F. R. P. – Finley Robinson Porter’s Masterpiece

Posted on May 12, 2014 by [David Greenlees](#)



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- *The sole surviving F.R.P., a 1915 Touring car can be seen at the [Seal Cove Auto Museum](#) on Mount Desert Island, Maine*

Finley Robinson Porter left his mark on the automotive world forever with his creation of the sensational T-Head *Mercer Raceabout in 1911*. That car soon became a legend while chalking up countless wins on the race track. By 1913, *Mercer Automobile Co.* management knew they would need to design an up-to-date replacement for the T-Head, but choose not to go with Porter’s designs for it. The Trenton, New Jersey company instead hired Eric H. Delling, the former chief engineer for the *Stanley Motor Carriage Co.* to design the new *L-Head Mercer* which was introduced in 1915.

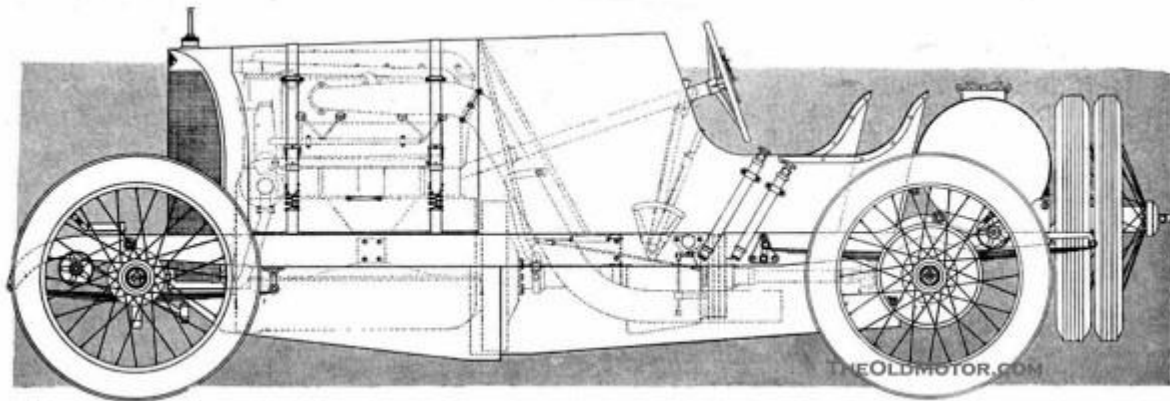


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- *Seal Cove Auto Museum F.R.P., photos courtesy of [Supercars.net](#)*

After leaving *Mercer*, Porter went to work to build his vision of the ultimate car, which he named the *F.R.P.* using his initials. And what an exceptional car it came to be, considering that it and the T-

Head Mercer before it, had both been designed by a man without any formal engineering training or a degree.

Reading the following specifications and figures and putting them in context with other cars being built at the time, show just how remarkable it was: a 454-c.i.d. four-cylinder engine, vertical shaft-driven s.o.h.c. cylinder head with hemispherical combustion chambers, gun-drilled cam and crankshafts, tubular connecting rods, an output of 100-hp. (listed at 145 brake-hp. in *The Motor*), construction of chrome vanadium steel, and magnesium-aluminum alloy, 88 mph top speed and a five-thousand dollar chassis price.



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- "The Automobile", November 12, 1914

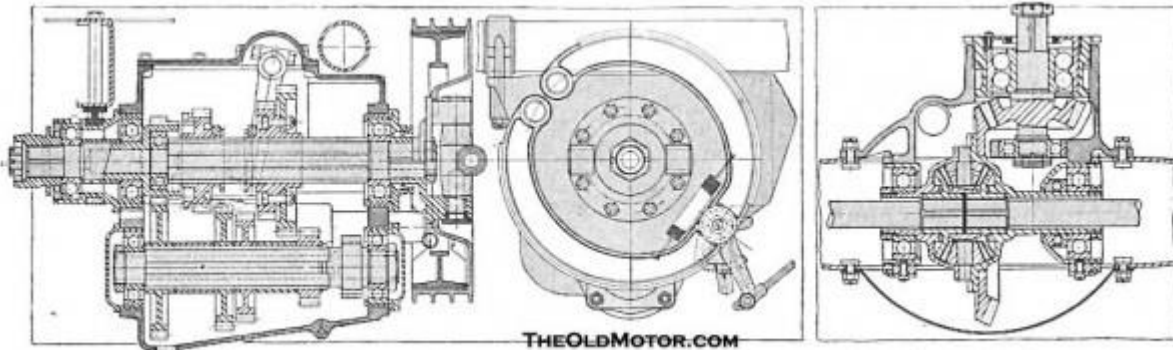
Three models were initially announced: the Series A 110-inch w.b chassis, as seen above with a racing body, the Series B with a 130-inch w.b., and the 140-inch w.b. Series C.

It was an outstanding achievement at the time, but in spite of having designed the ultimate American car, Porter was unable to move forward due to lack of finding the financial backing necessary to begin production; in addition, introducing the car only a few months after the start of World War I and the threat of possible involvement by the United States came at the worst possible time.

F. R. P. 100-Horsepower Chassis, \$5,000
 Vertical-Head Four-Cylinder Block Motor—Speed and Lightness—A Key Bolt—Rods to Drive

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- Full details of the F.R.P., "The Automobile", November 12, 1914

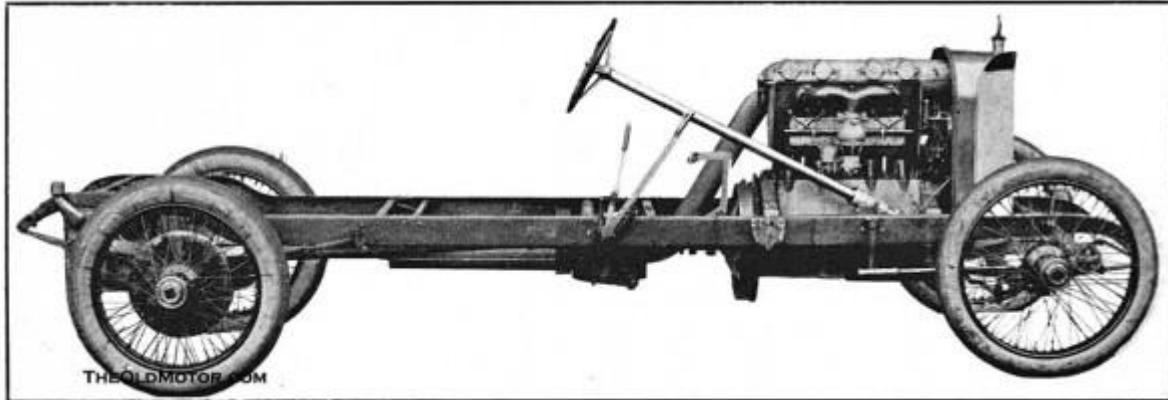
David Gooding has reported in his excellent article on the F.R.P. in *Automobile Quarterly* Vol. 31 No. 34, that supplies and parts for forty chassis' were initially ordered. Exactly how many were built at the Port Jefferson, Long Island, New York facility, may have only amounted to somewhere between five and ten. Coachwork for the cars could have been built by any of a number of fine builders in the Tri-state region specializing in such work.



Left—View through three-speed gearbox used in F. R. P. car. Middle—Transmission brake. Right—Section through rear axle

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- “The Automobile”, November 12, 1914

With the involvement of the U.S. in World War I, the government took over the *F.R.P.* facility for its use during the conflict. Porter with his engineering talents spent the war years in Dayton, Ohio, in charge of testing Liberty aircraft engines. After the war he choose not to build any more of the cars, but instead stayed in the aircraft industry, working as chief engineer for the *Curtiss Engineering Corp.* in Garden City, Long Island.



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- “The Automobile”, November 12, 1914

There is more to the story, and we will return to it at a later date with the *Porter-Knight* cars prepared for entry in the 1915 Indianapolis 500. They were equipped with a sleeve-valve racing engines that Porter’s friend John North Willys built. The post-war *Porter* car built in Bridgeport, Connecticut, will also be covered. It used the remaining parts left over from the *F.R.P.* and was overseen by Porter’s son Robert Brewster Porter who became the chief engineer for Porter. If any of our readers can point us to any more information or photos covering the *F.R.P.*, the *Porter-Knights* and the *Porter* please let us know.

This entry was posted in [Auto photos 1885 - 1920](#), [Pre-War Contemporary Photos](#) and tagged [Curtiss Engineering Corp.](#), [David Gooding](#), [Eric H. Delling](#), [F.R.P. car](#), [Finley Robinson Porter](#), [John North Willys](#), [L-Head Mercer](#), [Liberty Aircraft engine](#), [Port Jefferson Long Island](#), [Porter-Knight cars](#), [Seal Cove Auto Museum](#), [Stanley Motor Carriage Co.](#), [T-head](#). Bookmark the [permalink](#).

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8 Responses to *The F. R. P. – Finley Robinson Porter’s Masterpiece*

1. Paul says:

May 12, 2014 at 7:01 am

David,

Very Interesting stuff. Do you know if the design of this engine predates the arrival of the MB 1914 OHC GP engine ? I think Depalma's arrived in late July 1914, but details may have been known after the French GP on July 5. I am curious about the enclosed valvetrain, inspection plates and the offset rockers. Any more photos of the cylinder head ?

Paul

[Reply](#)

○ **David Greenlees says:**

[May 12, 2014 at 7:54 am](#)

Paul, I don't know when he started on the design of this engine, but to bring it to the point in 1914 so that he could be testing it he must have started on the design a year or two earlier.

No sorry, I don't have any other photos showing more details of the engine. In "The Motor Age" 5-31-1917 issue it was announced that the head was going to be changed to 16-valve unit, although we do not know if this was ever accomplished or not.

[Reply](#)

2. **Roberto Rodriguez says:**

[May 12, 2014 at 11:27 am](#)

David,

Many thanks for the article, and posting the photo of the Museum's car.

You can find out some more about the car in Dean Batchelor's book, "Harrah's Automobile Collection – One man's tribute to the great automobiles of the World." The F.R.P. was at the top of Harrah's most wanted list and Batchelor's account of the search for, and purchase of, the car makes for a good read. Harrah's acquisition of the F.R.P. was so important that a full page feature article about his "most sought after car" was published in "Harrahscope."

The F.R.P. eventually made its way to Richard Paine and the Seal Cove Auto Museum's collection after Harrah's death in 1978.

We have some fabulous automobiles at the Seal Cove, but my absolute favorite is the F.R.P.

Cheers,
Roberto

[Reply](#)

- **David Greenlees** says:

[May 12, 2014 at 11:47 am](#)

It was on Harrah's most wanted list for good reason, it is an incredible car. I want to come visit it when I can find the time.

[Reply](#)

- 3. **Perry Smith** says:
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[May 12, 2014 at 10:41 pm](#)

Amazing technology; thank you for this great post. I am confused on how the emergency brake could work with many 2 1/2 inch diameter drums. Where are they? I assume the linkage visible in the picture is for the service brakes. Any enlightenment?

[Reply](#)

- **David Greenlees** says:

[May 13, 2014 at 7:45 am](#)

Perry, The foot brake was the single drum on the back of the transmission. The hand brakes were on the rear wheels. This was somewhat common up until this time.

[Reply](#)

- 4. **Walter McCarthy** says:

[May 17, 2014 at 8:58 pm](#)

I have many FRP photos about 40, and also a catalog. I have always found it a most interesting car!
Walter

[Reply](#)

- **Brandon** says:

[June 9, 2014 at 10:56 am](#)

Walter, are those period photos??? If so, it would be a great service to have David post them. This is one of the most heart-breaking 'what might have been' stories in American automobile history. Had Mercer management embraced Porter's OHC design, the future of both Mercer and Porter might've been very different. Instead, Porter boldly forged ahead on his own, but already the industry was consolidating and outlier companies were culled.

[Reply](#)