

# The Chalmers Automobile Newsletter

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Along with the usual newsletter features, this issue includes a special focus on the Model "30". Forty percent of the active members own this model. The Model "30" was introduced in the summer of 1908 as a new lightweight car with 30 horsepower for only \$1,500. This model reflected the best engineering design available from the then leading automobile designers in Europe. The special focus on the "30" is told with a story from the past followed by and some highlights that expose a few interesting facts about the Model "30".

## FROM THE MEMBERSHIP

Tom Van Meeteren (#14) recently wrote me about taking his 1916 Model 35-A "Six-30" on a Sioux City, IA club tour. Remember, this car was the "Chalmers pickup truck" featured in newsletter 2-3! The Sioux City tour consisted of two legs, each about 65 to 70 miles long, and all the other cars were younger than Tom's 1916. The next youngest was a 1929 Ford Model A. Club organizers actually called Tom and told him: "This is a long tour and that older cars were welcome, but they may not be able to keep up". Tom reports that the 35-A easily kept up with the competition and that he only had one problem - it rained.

Later that evening at the awards banquet, the "Ford's", "GM's", "MoPar's", and "Best of the Rest" awards were presented. Tom was pleasantly surprised when it was announced that his 35-A won the "Best of the Rest" award. Congratulations Tom, again (ref. newsletter 5-3), for another trophy.

Another surprise for Tom occurred during the Sioux City tour when he was introduced to 90-year-old Charles Wetmore. Charles explained that his dad, H. A. Wetmore, operated the Wetmore Chalmers dealership in Sioux City. After learning the background of Tom's car, Charles speculated it was most likely first sold from his dad's dealership. H. A. not only sold Chalmers', but he also raced them and got to know Hugh Chalmers while attending dealership meetings in Detroit. The encounter was topped off with a ride in Tom's 35-A, which was a thrill for Charles. (Editor's note - Tom has recently opened his own restoration shop where he enjoys the business of working on his customers old cars full-time.)

## CHALMERS CLASSIFIED

The Chalmers Classified listing is intended as a service for members to advertise Chalmers cars and parts that are for sale and/or wanted. Please contact me regarding items that should no longer be listed and pass-on your new wanted and for sale items.

### WANTED:

- 1922/1923 hubcaps (posted 4/2000) - contact Bob DuBois (#9).
- 1912-1914 Chalmers Model 12/18 "Six" (also 1910-1912 Model "Forty", 1912-1914 Model "36", or 1914-1915 Model 24/29 "Master Six") (posted 4/2000) - contact John Lehnert (#35).
- 1914 Chalmers Model 24 "Master Six" shop manual (posted 4/2000) - contact Jim and Donna Stamper (#52).

- Model T Splitdorf magneto for 1912 Chalmers Model 11 (posted 12/2000) - contact Al Shaw (#25).
- 1911 Chalmers Model "30" Pony Tonneau complete rear axle assembly (or any parts for it) (posted 7/2001) - contact Fred Hoch (#38).
- 1910-1912 Chalmers Model 11 "30" exhaust manifold gaskets (posted 4/2001) - contact Al Shaw (#25).

**FOR SALE:**

- 1916 Model 35-A "Six-30" parts and some sheet metal (posted 4/2000) - contact Don Ohnstad (#19).
- 1909 Model F "30" engine cooling fan assembly (includes fan, hub, pulley, and bracket) in good painted condition with no rust for \$95 or best offer (posted 9/2000) - contact Chuck Fanucci (#45).
- 1917 Model 35-A "Six-30" described as a diamond in the rough that is drivable but needs some restoration for \$5,000 (see it at <http://www.AlternateFuels.com/1917.htm>) (posted 4/2001) - contact Glenn DeRosa (#58).

**A STORY FROM THE PAST**

The following comes from an early 1900's issue of a magazine published by the Chalmers Motor Company called "*The Chalmers Owner*". The magazine's objective was to help owners get the most pleasure out of their Chalmers automobiles. It contained marvelous stories from owners as well as tips or hints for owners.

**A Story of the "30" That Does All But Swim**

When James and Harry E. Sterling, their mother, and Miss Maude Newcomer, of Masontown, Pennsylvania, decided to visit relatives in Siloam Springs, Arkansas, and to make the trip from Pennsylvania in a Chalmers "30" touring car a lot of motorists in the east advised them either to leave the car at home or ship it, and make the trip by train. Friends of Mr. Sterling, in Masontown, told him he could not make the trip from Pennsylvania in a car of the power of a Chalmers "30" without great expense.

But the little party had their hearts set on an automobile journey and would not change their plans. They had a rather remarkable trip and encountered many obstacles, but finally reached their destination. Despite bad roads, flooded streams and mountain travel, the Chalmers "30" came through perfectly until the party ran into a cyclone which was followed by extremely heavy rains. The car was then abandoned and the party went on to Siloam Springs by train. Mrs. Sterling and Miss Newcomer were left in the Arkansas town, after which James M. Sterling, Stanley King and Roy Flickinger went back to the abandoned automobile and drove it through to the end of the journey, a total distance of 1,174 miles.

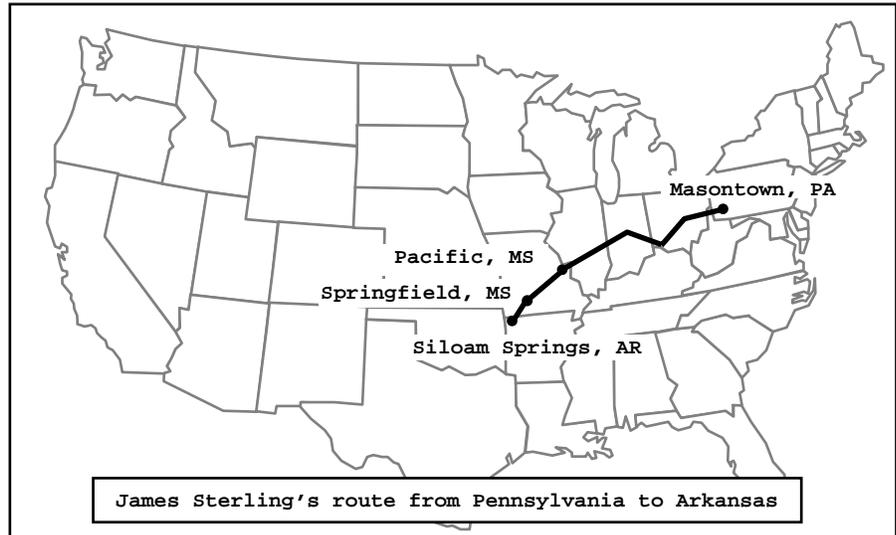
Mr. J. M. Sterling tells of the experiences encountered on the trip in a letter to the Chalmers Motor Company:

**A Perfect Record**

"I have made a perfect record with my Chalmers "30". This car was driven about 2200 miles before I started from Pennsylvania to Arkansas. From the time I left Masontown, Pennsylvania, until I arrived in Siloam Springs, Arkansas, I was on the road just ninety-six hours. I drove all the way without a puncture and without spending one cent for repairs. The only thing that gave us any trouble was the loss of a nut off one of the fenders.

"We had fine roads through Ohio, Indiana, and a part of Illinois, but they were the worst I ever saw in Missouri. We started into the Ozark Mountains about 150 miles from St. Louis and that is where our trouble began. For more than twenty-five miles one of us had to walk ahead of the machine to look for stumps and large stones. Part of the time we were building roads over steep hills. Then came the trouble with creeks and rivers.

We were held up for about four hours one afternoon trying to get out of a flooded sand-pit, but we could not make it. We had to get a team to pull us out and that was the only time that we required any help.



### Water Over Magneto

"We used ordinary store gasoline for about 250 miles. We could not get any automobile gas at all, but the substitute worked finely. We forded the Cowskin River, and in one place the water was over the magneto about three inches. The engine stopped, so we had to get out and push the car to shallower water so that we could work at it. The crank case was full of water, but after we had drained it the engine started readily on the magneto which we had to use because the battery box was full of water.

"Near Pacific, Missouri, we encountered a cyclone, and after that it rained so hard and the streams were so swollen that we had to abandon the car, which did everything but swim.

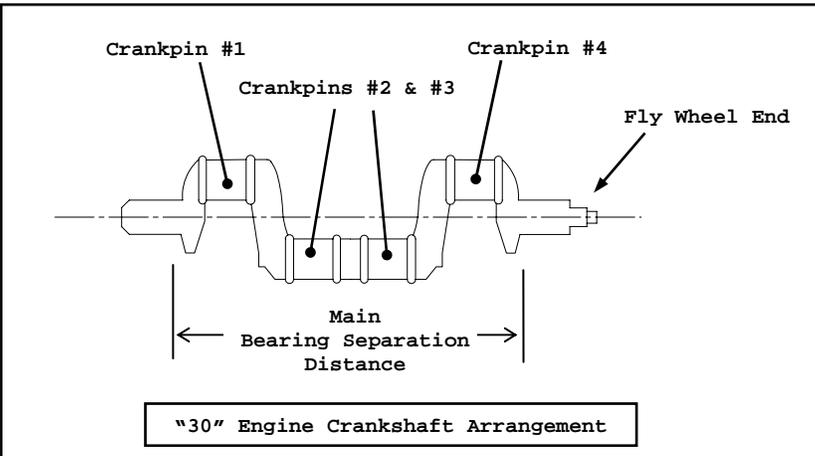
"Of course it is impossible for me to tell you everything that happened along the road, but I can say that the car was running just as well when we reached Siloam Springs as it was when we started from Pennsylvania. I want to let you know that I think a whole lot of my Chalmers "30"."

The following is from the *Benton County Republican*, Siloam Springs:

“At Springfield, Missouri, a garage man told the Sterling party that the trip was a record-breaker; that only two machines had ever gone over that route, and as they accomplished the journey without accident, Mr. Sterling was highly pleased. Their traveling covered a period of ten days. The car was driven all the way by James M. Sterling. The trip showed the Chalmers “30” to be a car built for rough travel.”

### SOME CHALMERS "30" HIGHLIGHTS

The Model "30" was a Howard Coffin design that ranked among the finest cars manufactured in 1908/1909. It certainly was an outstanding advertising success for Chalmers as the "30" started accumulating important awards in various tours and race events. The most significant design characteristic of the "30" series is the unit engine/transmission design. This design consists of a single 4-cylinder block casting (called "cast en bloc") with integral clutch and



transmission case bolted to the engine. What made this F-head engine unique was the crankshaft. There were only two main bearings for the crankshaft and they were of the annular ball bearing style. These bearings were seen mainly on the more advanced European cars in that period. The two bearing crankshaft required only 3 offset crankpins, the 2<sup>nd</sup> and 3<sup>rd</sup> piston connecting rods shared one long crankpin as seen at the left. Theoretically, this results in a short, stiff crankshaft that

provides high reliability under hard running conditions.

However, as time passed and mileage accumulated, it became apparent that the Model "30" engine had a latent design problem. A 1918 SAE paper analyzed the relationship between the main bearing separation distance and the crankshaft diameter. These two parameters are directly proportional to each other (e.g., greater separation requires a larger diameter) in order to resist crankshaft-bending stresses. The paper concluded that a two-bearing/4-cylinder crankshaft, of the proper diameter like the Chalmers "30", produced greater bearing contact speed and that in turn caused excessive heating of the bearings (tangential velocity increases with diameter). Complaints of worn bearings were noted in 1916. The first sign of trouble is a singing sound coming from the worn bearings. If ignored, the bearings will wear to the point that they allow the crankshaft to drop. This then misaligns the clutch in this Coffin engine design. The result is a car with a slipping clutch that can't move and a very expensive repair bill.<sup>1</sup>

With proper maintenance, this condition can be avoided. Chalmers factory literature urged Model "30" owners to check their crankcase oil level daily and to change the oil every 1,000 miles. Obviously, the award-winning Chalmers factory cars received this kind of preferred maintenance, but some private owners did not follow these guidelines. Good advice to the modern day owner is to minimize bearing wear and heating by proper oil level and oil change maintenance.

That's all for now - keep those comments and questions coming in.

Dave Hammond

<sup>1</sup>Special thanks to DJ Kava, a fellow member of the SAH, for contributing to this information.