HAYNES ENTERS IN FIRST AUTO LISTS

Apperson Claims Aired in New Affidavit.

NOVEL ANGLE PRESENTED

Pioneer in Game Tells of How Idea Was Born of Car Without Horses.

Now comes Elwood Haynes, manufacturer and designer of the Haynes car, with still another angle in the celebrated controversy as to who thought of, designed and actually built the first automobile. Mr. Haynes' side of it is that he himself did the aforesaid thinking, designing and building of the only and original first car, and in witness thereof he has prepared and submitted the following affidavit. For the benefit of those interested in the controversy, it is herewith appended in full:

"For three or four years before coming to Kokomo I had been thinking about the possibility of making a carriage which could be driven by its own power. At first my idea was to run it by steam, but I abandoned that thought because at that time I did not consider it advisable to have an open fire burning in a vehicle, and besides I felt that the problem of carrying a sufficient water supply was a difficult one. So I gave that up.

"Then I turned my attention to the internal combustion engine. This gave me food for thought, and several times I tried to get around to the actual planning of the machine, but my work as superintendent of the Natural Gas company in Kokomo kept me too much occupied.

How He Thought of It.

"It was almost midsummer in 1893—I came to Kokomo in December, 1892—before I was able to give the matter any serious attention. At that time I had no idea whatever of the automobile as it is today, and naturally not of the automobile business. My sole idea was to see if I could not make a carriage that could be driven without horses. After I decided to use the gas engine I bought one from the Sintz Engine company. It was shipped to me in October or November of 1893, and I set it up in my own home. I don't think the Appersons saw it, or even knew that I had it. I remember that a girl who worked for us at that time asked Mrs. Haynes if I was trying to make a carriage that would go without horses, and when she was told that I was, she said:

"'Well that surely will be a scrumptious sight—you and Mr. Haynes ridin' down the street in a buggy without any horse in front of it.'

"When I got ready to get down to actual work on the invention I asked Mr. Lafferty regarding a machine shop where I could get some work done, which I did not want made public. I realized that my efforts would awaken a lot of comment and ridicule if made public and for that reason as much as anything else, I wanted everything done confidentially.

"Mr. Lafferty recommended the Apperson shop, and said that nobody was allowed inside it during the day. So I went there and called on Elmer Apperson. I had never seen him before. I told him what I wanted, and he said that they were not very busy and that they would be glad to undertake the work. I asked him if they would rather do the work from the drawings and make an estimate, or would they rather do it by the hour. He said he would rather take it by the hour, and in that way, it would be satisfactory for both of us.

Some Mathematical Problems.

"I told Mr. Apperson specifically that I would not hold him responsible for the outcome, but that I did expect good construction and good mechanical work, and that I wanted the work well done.

"Then I brought the drawings for the machine. The frame was a double hollow square of tubing; the front axle was to be swiveled on with a large kingbolt. I had to work out the pitch of the sprockets and various other engineering items—and I had to use a little trigonometry to do it. I am quite sure that neither of the Appersons knew much, if anything, about engineering or could use mathematics in any way on such a problem. Elmer not only told me that he could not calculate the horsepower of an engine, but also told me that I was the only man in town who could do it.

"In order to make a machine that had a chance to run, it was necessary first to determine the amount of traction required to overcome the road resistance. I had no means of doing that except by having a man on a bicycle towed behind a buckboard drawn by a horse. I attached a spring scale to one end of the towline, and the bicycle to the other, and had a man on the buckboard take readings of the pull registered on the spring scale. We kept a record of the readings, averaged them and arrived at the result. The man and bicycle weighed 200 pounds and the test showed that it took 3½ pounds of traction to move this weight, which gives something like 17½ pounds to the 1000 pounds of weight in a motor car—which is about the standard of today.

"Then it became necessary to estimate the torque, which I did by means of a brake on the flywheel of the engine. I believe it was nine pounds. I was able to determine from these figures what gear ratio I must have to drive the vehicle over a level road. I arranged for two speeds—the low speed just strong enough to move the machine up a 4 per cent incline. It could barely do this. On the other hand it moved right off on the level road, carrying three men.

"The first drawing I made for the placing of the engine contemplated having it horizontal. I abandoned this, as I saw that a horizontal engine would not work practically, and adopted the vertical installation.

"Now, there may have been some slight changes in the plans, to enable the workmen to follow them more easily, and if those minor changes constituted the designing and building of the car, then certainly the credit for it belongs to the Appersons. But, if the engineering plan enabled them to carry out my ideas and instructions—the idea, the designing and the drawings and the general plan—then it seems to me the credit is mine. It would have been practically the same machine if built in any other machine shop in the world or by any other workmen.

"I did not object to slight changes, so long as they did not interfere with the basic plan. For instance, the sprocket wheels, which transmitted the engine power to the rear wheels by means of ordinary bicycle chains such as were used then, did not exist at that time. I designed the sprocket wheels and calculated the pitch line. Most of the work on the machine was done by Billie Adrain and very little was done by the Appersons. They owned and ran the machine shop, and took my job in at so much an hour. Edgar did some work on it, but Elmer did very little.

Wants History Correct.

"Later on, when we got into the business of manufacturing horseless carriages, I created several more new ideas. For example, I proposed the design of the double opposed motor. The idea was mine, and it was carried into execution under my direction. I remember that Henry Ford at one time came to me and voluntarily said that he got his start from this very form of motor.

"I have no desire to take part in an argument or a dispute. I have always avoided this, being content to allow the facts to carry their own impression to whomever was interested in the matter. All I am interested in is that history shall be correct and fair to all concerned.

"The men who took part in the work of making the first car of mine have made affidavits setting forth the facts and have sworn to them. They did this a long time ago. Nothing has ever been produced to refute these workmen's sworn testimonials.

"(Signed) ELWOOD HAYNES."

Subscribed and sworn to before me this 17th day of June, 1920.

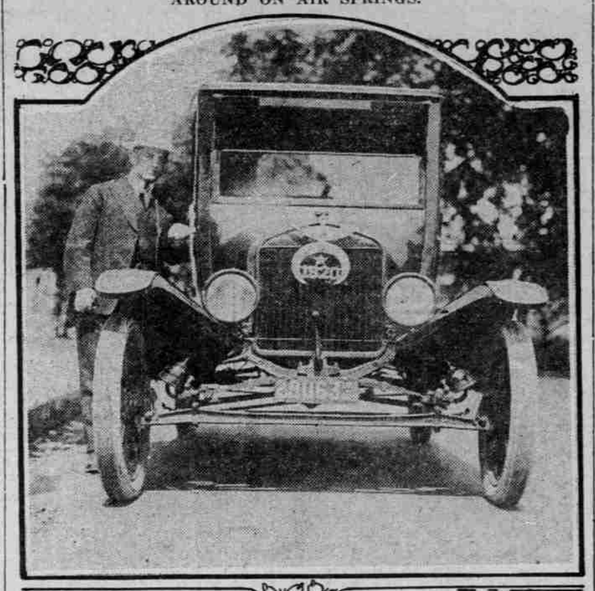
(Signed) NELLIE A. MANNIAN.
Notary Public.

My commission expires August 17, 1921.

Long Parade of Autos.

There are in round numbers 8,000,000 motor vehicles in use in the United States at the present time. "Make one grand procession of all these cars," says Howard Greene in the May issue of Motor, "allowing four feet between cars, and the line would be 20,000 miles long. If they traveled 20 miles per hour and you made up your mind to watch all of the procession go by, you would have to sit on the fence for six weeks, day and night. That's what 8,000,000 cars mean."

AND NOW FORDS AS WELL AS PIERCE-ARROWS CAN RIDE AROUND ON AIR SPRINGS.



This picture shows a Ford coupe equipped with the new air springs for Ford cars invented by Lewis I. Thompson, Portland architect and inventor. Note the air springs just above the front axle on either side. Two more of them are on the rear. This device, which is the very latest thing in Ford shock absorbers, is known as the Thompson air spring, and a Ford equipped with them rides like a Pierce-Arrow. Standing beside the car is Martin F. Swift of the Howell-Swift Tire company, 445 Stark street, which is Oregon distributor for the Thompson air spring for Ford cars.

13 AUTOS ARE MISSING

HERE'S POLICE BUREAU LIST FOR LAST WEEK.

Auto Theft Department Asks the Co-operation of Public to Aid in Recovering Them.

Thirteen automobiles are on last week's stolen car list of the auto theft department of the Portland police bureau as not yet having been recovered. Co-operation of the public generally is requested by Lieutenant H. A. Thatcher, head of the auto theft department, in giving information as to any of these cars that may be seen.

Following is the list, which includes two Buicks, one Chevrolet, one Chandler, three Dodges, three Fords, a Maxwell, an Overland, and a Tulsa, also one motorcycle:

Buick, 1920 touring, Oregon license No. 13578, motor No. 586432.
Buick, 1916 touring, Oregon license No. 14817, motor No. 140495.
Chevrolet, 1919 touring, Oregon license No. 23120, motor No. C-2318, black.
Chandler, 1918 touring, Oregon license No. 8249, motor No. 54570.
Dodge, 1916 roadster, Oregon license No. 47641, motor No. 146172.
Dodge, 1918 touring, Oregon license No. 31678, motor No. 39903.
Dodge, 1920 touring, Oregon license No. 8298, motor No. 509486.
Ford, 1914 touring, Oregon license No. 73782, motor No. 121717.
Ford, 1919 roadster, Oregon license No. 13737, motor No. 3042796.
Maxwell, 1918, license tags missing, motor No. 227941.
Overland, 1918 touring, Oregon license No. 47765, motor No. 31670.
Tiura, 1920 roadster, Oregon dealer's license 799-A, motor No. 38856.
Harley-Davidson, 1919 motorcycle, Oregon license No. H-65, motor No. L-19 A-22401.

Protecting Gaskets.

When a gasket has been in place for some time the material often adheres so firmly to its base that removal is practically impossible without tearing the gasket. The way to obviate this trouble is to give the gasket a generous coating of graphite, which prevents adherence and permits using the part time after time.

MASTER TRUCK IN PENDLETON TERRITORY HAULS WHEAT UP GRADES ALMOST UNBELIEVABLY STEEP.

The truck in the picture on a recent demonstration conducted by the branch of W. C. Garbe, Inc., at Pendleton, hauled three tons of mill feed up grades of 30 per cent and greater through plowed fields. The purpose of the test was to illustrate the ability of the truck to take on loads of wheat at almost any place on these eastern Oregon wheat ranches, the topographies of which were not constructed by nature with a view to making wheat hauling easy. Some grades climbed by the truck were so steep that the load had to be tied on to keep the sacks from dropping off. This truck is equipped fore and aft with Goodyear pneumatic cord tires, which give traction where solid tires would slip. Many Master trucks are operating now in the eastern Oregon wheat fields, where they are great favorites with the ranchers.