



Overcoming Vibration

VIBRATION plays a very important part in the design and durability of the motor car, which must withstand conditions that the average piece of machinery never encounters.

The locomotive, for instance, travels upon a carefully constructed steel track which is especially a part of the machine itself; but the automobile is subjected to constantly varying road conditions which necessitates the use of pneumatic tires and various shock absorbing devices

Aside from the shocks that are received from outside sources there are also the motor or internal vibrations, which, bowever, are almost entirely overcome in



Not only is every precaution taken to eliminate the internal vibrations, but the entire design has been worked out a view of overcoming the irregularities of the highway.

Specifications in Brief:

Unit power plant, 3-point suspension, 6-cylinder 3½ x 5² enbloc motor, ac-tually developing 55 brake horse-power. 121-inch wheelbase. Left hand drive, center control.

Weight, 2950 lbs., giving more than one horsepower to every 55 lbs. of weight. Leece-Neville separate unit starting and lighting system. Ignition from stodage battery through Remy distributor and coil.

Economical Rayfield carburetor.

Vacuum gasoline system with gas tank

at rear of chassis. Splash and force feed lubrication. Forced water circulation. Crowned Fenders

Clutch, three-plate dry disc type lined

Transmission, selective sliding gear type, threespeeds forward, one reverse. Haynes full filating rear axle, axle shafts, pinion and pinion shaft nickel steel. Exclusive arch frame construction, with 54° elliptic chrome vanadium steel springs.

Low center of gravity and long sweep-ing body lines. 34x4* tires, Firestone demountable rims.

Motor driven tire pump.
Stewart-Warner Speedometer.
Improvedone-man top, Collinscurtains.

Clear and rain-vision ventilating wind-

Strapless tire carrier at rear of chassis.
Clear running boards. Headlights
with dimming device.
Electric Horn under hood.

Foreign Manager of the Maxwell Motor

Company Sails for New York

To-day

arms and Americans have been sent

ness neid.

Mr. Redden's return will throw much light on business conditions in foreign fields as he has ben in closest touch with all branches of industry and his prediction as to the future of European business from an American standroint will be awaited with install he awaited with install property.

pean business from an American stand-point will be awaited with interest. E. W. Shank, the local distributor, received during the past fortnight three carloads of Maxwell touring cars. During the present week he also re-ceived the first Roadster of the 1915 model and is delighted with its beauty, completeness and action.

1451 Zarker Street

Sterling Auto Tire Co.

fused. Call and look them

over. Open evenings and

ABBOTT-DETROIT

BRANCH,

106-108 S. Second St., City.

Sundays.

to take their places in the busi

The Haynes line also comprises Model 31, "Big Six" with 65 brake horsepower and 130-inch wheelbase—\$2250; Model 32, Haynes "Four" with 48 brake horsepower and 118-inch wheelbase—\$1660. It will be a pleasure to give you a demonstration. Come in or telephone for appointment

HARRISBURG AUTO CO.

THE HAYNES AUTOMOBILE COMPANY, KOKOMO, INDIANA

BOWMAN'S

GOODYEAR

KELLY SPRINGFIELD CAPITOL IMPERIAL All Guaranteed

AUTO TIRES

THIRD FLOOR-BOWMAN'S.

C. A. Fair Carriage and Auto Works

Manufacturers of Auto Tops, Bodies and Seat Covers Auto Painting, Rubber Tiring, etc.

We Manufacture and Repair Auto Springs

"QUALITY IS OUR MOTTO"

One of Their Handsome Cars Was Specially Built For the Friendship Fire Company

The Morton Truck and Tractor Company of this city, manufacturers of automobile trucks, fire trucks, gasoline hose and chemical trucks, exhibited the principal streets during the fire-

convention here. One of their handsome cars was spe-ally built for the Friendship Fire ompany. These were the first public tests given and engaged the interest and attention of many of the visiting firemen and our citizens. Samuel P.

\$2.00 and \$2.50 Tires Reduced to

Bicycles were formerly \$25.00 and \$30.00, now \$18.50

Including Coaster Brake Take advantage of this sale

EXCELSIOR CYCLE CO.

1007-09 N. THIRD ST. Open Evenings Bell Phone 1635J BRANCH: 126 N. Front St., Steelton, Pa.

ton, John Campbell and C. R. Morton

are all deeply interested in the growth and welfare of this company.

Forty men are already steadily employed at the factory. Four of their fire machines have been already completeness and action.

STAR-INDEPENDENT WANT ADS. BRING RESULTS.

Ten fire companies were waiting to see this week's demonstration before placing an order. The special features of their design, including their steering drive, separate gearing for the

ing drive, separate gearing for the wheels and even distribution of the load on all four wheels, are prominent and satisfactory.

Asked Too Much

but the steamer has sprung a leak and is quite likely to sink winthin fifteen

The Young Woman-Mercy, how very sudden.

Yes, miss. Will you let met add that I mean to do my best to save you, you intend buying a car, now you intend buying a car, now

"Thank you, sir, but of course I can't be saved unless my chaperon is saved, too." cars equipped with electric

saved, too."

"Very stout lady with the hook nose?"

"Yes."

"Good night, miss."—Cleveland Plain Dealer.

"Cleveland Colt and look them

"Pa, what is mediocrity?"
"Something your mother makes summer dresses out of, I think."—Detroit Free Press.

Miller Tires

1451 Zarker Street Sterling Auto Tire Co.

HEAT TREATMENT OF STEEL **IMPORTANT IN AUTO PARTS**

of George G. McFarland President of the Harrisburg Automobile Company, Distributors of the Haynes, America's First Car

Heat treatment of steel parts, especially the drop forged parts, plays a very important part in the automobile industry, though the value of treatment, according to George F. Mc-Farland, president of the Harrisburg Automobile Company, distributors in this territory for the Haynes, America's First Car, is little appreciated by the average owner on account of his lack of knowledge in regard to its possibilities.

carbon combined with iron and what is known as a solid solution of carbon in iron. The hardness and toughness of the steel depends upon the condition that this carbon exists in the steel. Heat treating in its elementary form consists in heating the steel to a few degrees above what is termed the critical temperature of the particular steel and then suddenly cooling the steel. The actual process is a little more complicated than this statement would indicate. When the steel reaches this critical temperature, there is a sudden change in its composition. The carbon and iron making up the steel change their relation, so that there is an actual change in the internal structure of the steel. The solid solution of carbon has increased.

The important steps of heat treating consists in getting the steel up to the proper temperature so as to obtain this changed structure, and then to cool the steel suddenly to retain the structure. All steel is crystalline, as a broken section will show, and a properly heat treated steel should show a fine silky grain, while the untreated steel is usually coarse grained. The effect of heat treating is to increase wonderfully the strength of the steel. For instance, a piece of steel that this carbon exists in the steel.

treated steel is usually coarse grained. The effect of heat treating is to increase wonderfully the strength of the steel. For instance, a piece of steel that would break under a pull of 60,000 pounds before heat treating will not break after heat treating until a load of 120,000 pounds is applied. The relative increase in strength due to heat treating depends, of course, upon the initial composition of the steel as to the per cent. of the carbon and other elements.

The use of heat treated forging slightly smaller than the untreated forgings used in the past years, en-ables the automobile to be built lighter and at the same time actually stronger and at the same time actually stronger. Every steel forging in the Haynes light six car, such as the crank shaft, cam shaft, steering knuckles, brake levers and connecting rods is heat treated. Even the gears in the transmission and rear axle are given the heat treatment to prevent any possibility of their being stripped, should an attempt be made to shift gears at the wrong time.

COMING BACK FROM EUROPE Maxwell New 1915 Model C. F. Redden, who has been abroad for several months and has had some thrilling experiences during the present war, has advised the Maxwell Motor Company, of which he is sales manager, that he will sail for America on the steamship Minnehaha, October 10, arriving in New York about October 19. Most of the foreigners who were in the employ of the Maxwell Company in their respective countries have taken up arms and Americans have been sent

\$695 17 New Features

The "Wonder Car." The sensation of the automobile world. The biggest automobile value ever offered under \$1,000.

Powerful, fast, silent and one of the easiest riding and most economical cars in the world.

A splendid, fully equipped real 5-passenger family automobile. With Sims high tension magneto, sliding gear transmission, left-hand drive, center control, anti-skid tires on rear and-

Practically All the High Priced Features of High Priced Cars

The easiest car in the world to drive. The greatest all around hill climbing car in the world. The car with a pure stream-line body.

Holds the road at 50 miles an hour.

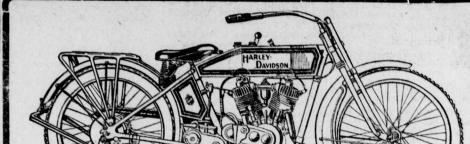
With Electric Starter and Electric Lights, \$55 extra.

E. W. SHANK

Maxwell Service Station Central Auto Garage 324 Chestnut St

Bell Phone 724





1915 Harley-Davidson

11 Horsepower GUARANTEED 3-Speed Sliding Gear Transmission Automatic Mechanical Oil Pump Step-Starter and 66 Refinements

\$275.00

The 1915 Harley-Davidson three-speed twin is the first motorcycle to climb a sixty per cent. grade. It has taken a sidecar and passenger up a fortyfive per cent. grade without a murmur.

1915 CATALOGUE ON REQUEST

HEAGY BROS.,

1204 North Third Street Harrisburg, Pa.

Open Evenings

ed the Maxwell Company's main office

in Detroit.

The account of Mr. Greene's experience is most interesting. He was in Paris with C. F. Redden, the Maxwell Company's sales manager, when the war broke out. Together the two men witnessed the mobilizing of French troops and the wild, but enthusiasm of the Parisians as they marched through the streets of their city singing and yelling.

On July 20, Mr. Greene reached Berlin and there again he saw scenes,

On July 30, Mr. Greene reached Berlin and there again he saw scenes, which only occur before a great war. It was while Mr. Greene was here that the Germans learned that the English were mobilizing. They had not feared so much before but their faces became serious when they learned of the action of the British. It was at this time of the British. It was at this time that Mr. Greene was taken as an English spy and was forced to spend several hours under guard before he was identified and released. Mr. Greene also witnessed an attack on the English Ambassador. Mobs followed his automobile and a troop of mounted policemen with drawn swords surrounded his car and accompanied him to safety. The Germans destroyed all things bear The Germans destroyed all things bear ing English names and the beautiful ce of the English Consul was

With such spirit against the English running high the lives of Americans were more or less endangered, due to the resemblance between English and American. For this reason the German authorities issued an edict that all Americans wear American flags as means of identification.

Mr. Greene was fortunate to secure

Mr. Greene was fortunate to secure transportation on a special train for Americans only, from Berlin to Rotter-tiam. There were 165 Americans on board and the usual run of seven hours occupied a day and a haif. The train had a dining coach but the passengers were compelled to sleep in their seats.

At Amsterdam, Mr. Greene took a train to the Hook of Holland from thence by boat to Harwich and another two-hour train ride brought him to London.

While en route to New York, the

don.

While en route to New York, the Minnehaha, on which Mr. Greene booked passage, had several delays. One night she was held up by a strange warship and not until the stranger was satisfied as to the nationality and destination of the Minnehaha was she allowed to proceed.

Several days out of New York a field of icebergs was encountered and created intense excitement on shipboard, and then as if to cap the climax, a hurricane sprang up, which threatened for a while to play havoe with the ship. New York was finally reached, however, and Mr. Greene reference to the Statue of Liberty undoubtedly voiced the sentiment of levery American on board.

AMERICAN IS DETAINED AS THE AUTO SHOW AT ST. LOUIS

The accessories department contained all the latest automobile parts, smart toggery, modish motoring coats, chic motoring hats, bennets and veils. The park exhibit is believed by many to show the cars to better advantage than an index display and gives to the cars to better advantage than fighter?"

SPY IN EUROPEAN WAR ZONE
Special Foreign Representative of Maxwell Motor Company Tells of Narrow Escape and Midnight Rides
—Takes Shortest Way Home

"If the Statue of Liberty wants to see me again before the European war is over, she will have to turn around."
Thus remarked E. M. Greene, foreign representative of the Maxwell Motor Company, of Detroit, as he stepped from a Maxwell touring car and entered the Maxwell Company's main office

TID Models Have Been on Exhibition During the Past Week

Past Week

Past Week

The American 1915 models of automobiles have been on exhibition at the St. Louis Auto Show during the past week, October 5 to 10.

Forest Park Highlands, the most popular summer garden, under the auspices of the St. Louis Automobile Manufacturers' and Dealers' Association, was the scene of this, their eighth annual show.

The accessories department contained all the latest automobile parts, small column. The other events of the Automobile Club of St. Louis.

A Fighter "I thought you said this dog is a

fighter? n indoor display and gives prospective urchasers a more comprehensive pierare of the ear in actual use.

On Thursday a large dance was given in the pavilion.

Monday a parade through the city meal."—Detroit Free Press.

GREAT SALE BRAND NEW **TOURING CARS and ROADSTERS** Catalogue and Name



Motor 4-cylinder, 41/4-inch bore by 51 stroke, dual ignition system, Stromberg car-buretor, 3 speeds centre control, right and lefthand drive, full floating rear, 34x4-inch tires demountable rims, 114-inch wheel base, and fully equipped.

These cars were ordered for export, but owing to demoralized transportation facilities could not be shipped, making it possible for us to buy the entire order for Spot Cash.

We have only a limited number, so act quick. Cars now on our salesfloors. Every car sold with a guarantee.

Gorson's Automobile Exchange

238-240 N. Broad St., Philadelphia, Pa.

Open Evenings and Sunday 10-2. Agents Wanted.