LONG TOURS LIKED BY FAIR PORTLAND AUTOIST

Mrs. H. J. Twitchell Gives Motoring Credit for Restored Health-Mount Hood Trip Liked Best.



MRS. TWITCHELL IN A COLE CAR.

............ ts. H. J. TWITCHELL, of 1829 | Mrs. Twitchell, "as I am out on the

Belmont street, is one of Portland motoring experts of the feminine sex Mrs. Twitchell drives a Cole "Thirty", and is shown in the above picture at the wheel of her car. Mrs. Twitchell particularly enjoys taking long motoring trips, and has driven to Salem and Eugene many times, to visit friends. She has made the Mount Hood trip several times, and has also driven to Tillamook.

"I keep my car pretty busy," said and in high spirits."

Mrs. Twitchell, "as I am out on the roads every sunshing day and a great many days when the sun doesn't shine. I may days when the sun doesn't shine. I may day and a great many days when the sun doesn't shine. I may day and a great many days when the sun doesn't shine. I may day and a great many days when the sun doesn't shine. I may day and a great many days when the sun doesn't shine. I may the sun doesn't shine. I may day and a great many days when the sun doesn't shine. I may days when the sun doesn't shine. I most enjoy the beautiful trip to when I have the tonneau filled with friends and am off for the mountains. I always had been somewhat frail and delicate in health, but since I have been motoring so much, I keep well and strong. The fresh air and the keen interest of driving my car keep me buoy ant and in high spirits."

an experiment. The primary object of

NEW DEVICE EXPLAINED

all from this tank when it is desired to start the motor. This air is carried to a distributer operating upon the same principle as the commutator used with the double ignition system. This distributer allows the air into the cylinders which are ready for the working stroke in the order of firing. In this way the motor is operated by compressed air instead of cranking, until the cylinders draw enough mixture on the downward stroke for the ignition to take it up.

This system is no doubt the most generally used, yet the Chalmers starter is a part of the motor, in fact integral with it and not an accessory.

"The coll spring starting device has been in use for some time, but is not altogether a satisfactory system. The electric starter has also made its appearance and is said to have proven of great value."

an experiment. The primary object of the self-starfer is obvious. At the same time simplicity is essential to satisfactory service, considering the knowledge the average automobile owner has af such things. The one desire of automobile designers is to simplify gas motors, so it is but natural that the simple self-starting device will find the simple self-starting device will find the share equally with simplicity.

The principle of the Chalmers self-starter is one of the casiest understood of any used. Says C. H. King, of the H. L. Kents Auto Company, "Compressed air is taken from No. 1 cylinder through a check vaive located in the bylinder head and is stored in a tank under the body of the car. A dash valve, accessible to the driver, releases gia, entered the Glidden tour from New York to Jacksonville, Fla., inviting nine other Governors to participate in the contest and ride in his Maxwell car, other well-known public men have



RICHARD CARLE IN FIVE-PASSENGER LOCOMOBILE.

The STEARNS-KNIGHT DEMONSTRATOR IS HERE

THE CAR AND MOTOR



THE CAR AND MOTOR

that has aroused more enthusiasm and received more favorable comment than anything previous in motor car history.

proven to be far in advance and far superior to other types of motor cars, for today the sleeve valve motor ranks highest.

ACKNOWLEDGED AND ADOPTED BY DAIMLER MERCEDES

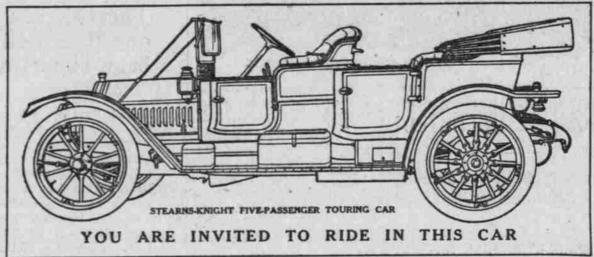
The F. B. Stearns Co. have spent over one hundred thousand dollars to prove this motor in the new Stearns-Knight and in addition Daimler, Mercedes, Panhard and Minerva-all world-leaders-spent over half a million before this motor was acknowledged and adopted by them.

L Before you invest in a new car examine the new Stearns-Knight-see for yourself the car that has revolutionized motordom.

(Although new to America this engine has number of years.

displaced the power plants that made those cars pre-eminent. It has caused the manufacturers of the finest engines in the world to acknowledge the supremacy of the Knight type sleeve valve motor.

C Power far greater than is possible in other engines



plications are done away with. In plications, trouble, noise and loss of their place is a silent, smooth-running power are eliminated. Instead, in motor that adds pleasures previously each cylinder are two thin cylinunknown to motoring.

LIt gives the owner an engine far in advance of anything before produced-an engine that is always silent and vibrationless—that takes a sharp hill at slow speed or rushes it with quiet irresistible power. An engine that runs silently along on high speed, yet with a touch of the been in use abroad for a throttle leaps eagerly to any speed desired. The feel of the engine-In the world's best cars the touch—the response—all furnish this new type engine has a new sensation to the motorist.

In this motor, action is not dependent on ordinary valves such as used in all other four-cylinder American cars. Cam shafts, springs, stems,

of equal size is produced. All com- timing gears and the attendant comdrical shells of iron, called "sleeves," one inside the other, sliding smoothly up and down in a film of oil. These sleeves have ports in the sides and as they pass each other produce positive valve openings impossible to secure in any other way.

> Driefly, the new motor is silent, vibrationless, flexible, powerful and

> There are no complications—no timing gears, cam shafts, poppet valves, spring or stems.

There is no loss of power—valves do not wear, compression does not lessen, power is not wasted.

ACKNOWLEDGED AND ADOPTED BY PANHARD MINERVA

There is no guesswork action is not dependent upon springs-it is absolutely positive.

L Efficient in the extreme -more power is devel-oped-all gas is utilizedcooling is much easier.

And in addition to a most perfect power plant and car, the Stearns-Knight is the most completely equipped car in America.

This equipment includes: Warner Auto-Meter Model K Banker Windshield

Klaxon Horn Silk Mohair Top and Cover Electric Generator Lighting

System Continental Q. D. Demount-

able Rims Muffler Cut-out Footrest, robe rail; trunk rack,

bulb horn, etc. LYou will find in the above the highest grade and most complete equipment that could possibly

be put on a car. We invite you to call at our salesrooms and ride in this car.

A phone call makes an appointment for a demonstration.

Stearns-Knight Auto Co.

492 ALDER STREET

"It is indeed gratifying to witness

Today the entire civilized world

F. W. Vogler, Manager A Few Agency Propositions Open PORTLAND, OREGON

Auto Building Now Conducted

Auto Building Now Conducted as Sane Business.

BARNUM IDEAS EXPELLED

Conservative Element Uplifts Industry to Rank of World's Stable Products, Says Portland Dealer.

"Today the entire civilized world knows to its own satisfaction what the horseless carriage can and does do. It knows that the motorcar will go anywhere and everywhere as fast as one may care to ride, and, better still, it is reliable and will get them home again. For these reasons stunts have passed their usefulness.

"In their place the reliable manufacturers are all using their venius," "To the initiated and those who

To the initiated and those who have followed the trend of the motor-car industry, it is not difficult to see that it is going through a process of elimination—the weeding out of undesirables, both men and things," says Tom Deering, manager of the local branch of J. W. Leavitt & Company, distributors of the Overland.

"Today there are none who can say that the making of good motorcars is a game. The infantile diseases have been cured, the industry has been farmingsted and now stand before the world in its rightful place—at the top of the country's industrial achievements, ranking with the shoe, steel, cotton and woolen industries.

"In their place the reliable manached received and in the process of country and some in almost every town in the country, used extensively both for business and pleasmost of the Diversion and in price, and selling them by honest business actual most every town in the country, used extensively both for business and pleasmost every town in the country in construction and in price, and selling them by honest business actual most every town in the country most entity and business actual most every town in the country in construction and in price, and selling them by honest business actual most every town in the country in construction and in price, and selling them by honest business actual most every town in the country in construction and selling them by honest business actual most every town in the country in country, used extensively both for business and pleasmost on the business actual business actual most every town in the country for the country form of automobiles. That is, and of necessity must continue to be, the paramount issue in the building and the marketing of automobiles. That is, and of necessity must continue to be, the paramount issue in the building and the marketing of automobiles. The business have go on it after it reaches the reliable manaches and is the process of the business and pleasmost with the taking care of the business of the business and pleasmost with

and merchandising methods, we have today an industry built upon a foundation as firm a Gibraltar, employing a vast army of men, payrolls which reach into huge figures, besides pulling up with it hundreds of accessory and parts concerns, employing another army of workmen, the investment of capital totaling hundreds of inilions from which the state treasuries receive fabulous amounts in taxes." ity from the ranks.

"The day of so-called 'stunts' is but a matter of history. P. T. Barnum ideas no longer have a place in this great business. There have been a few good stunts pulled off by the livewire publicity men and there is no denying that some of those accomplished considerable good in the early days—but no more. There was a period when the public was not motorwise and 'had to be shown' what the automobile was capable of accomplishing.

LINN COUNTY SALES GROW One Hundred Machines Purchased

in the Past Season.

ALBANY, Or. Sept. 23.—(Special.)—
The number of automobiles in Linn
County increased more than 50 per cent
this year. At the beginning of 1911
there were about 150 cars owned in
Linn County. During the past season
between 80 and 100 cars were sold to
residents of the county, making the
number now in use in Linn aimost 250.
Not only has the number of automobiles increased but their use by people
not owning machines has become much
more general. Two years age there not owning machines has become much more general. Two years age there were no cars fer hire in this county and a year ago only a few. Now there are a number in this city and some in almost every town in the county, used extensively both for business and pleas-

PROPER CARE IS ESSENTIAL DECLARES DEALER.

In Adjustment of Device Beginners Are Advised to Study Cause of Trouble.

"The average clutch has its vagaries," says Manager Cohn, of the United Auto Company, "Sometimes it may be just right; at others it may be slipping; again, it may be what is called flerce. The second condition manifests itself in such unpleasant situations as climbing a hill when, with the engine run-ning at its highest speed and the proper gear engaged, the car starts to run backward instead of forward. Or on the level, when, with the engine rac-ing and the high gear in, no speed re-

The last condition shows itself in the sudden jumping forward of the car when the clutch has been let in, or it

that will not slip easily,

leather. If this is all in good shape,

leather. If this is all in good shape, with an apparently good surface, but has jubricating oil on it, wash the surface well with gasoline. It is not a bad idea to roughen the surface of the leather a little with a coarse file.

The harsh or fierce clutch is remedied by the application of a proper oil for this purpose. Castor oil is universally used, and a good way is to soak the complete clutch in it overnight. This will cure a case of harsh leather, but it may be that the trouble is only a lack of adjustment of spring tension. Usually there are an adjusting nut and a locking nut. Back off the latter and make an adjustment. Then tighten the lock nut to retain it. For the beginner it is better to adjust For the beginner it is better to adjust a little at a time and make several successive jobs of it than to try to do it all at once. But always adjust it just as soon as possible."

More 1912 Models Here.

Among the new arrivals of 1913 models last week were the Pierce-Arrow, Cadillac and the Wood Electric, They are now on exhibition at the Covey Motorcar Company.

y even be so severe as to shear off The best roads are sometimes the bevel driving gear when used with scenes of the worst accidents.

Throw Away Your Prest-o-Lite and Generators Install the APLCO Electric Lighting System on Your Car

> Phone Marshall 3230 804 SPALDING BUILDING