ELECTRIC FAVORED FOR CITY TRAVEL

Good Reasons Advanced for Increase in Demand for These Cars.

CARE NEEDED IS SLIGHT

If Battery Is Given Necessary Attention and Flushed at Intervals Little More Is

Required.

BY J. L. D. KEPPY.

The electric is fast becoming recognized as the most convenient car for town use and the interest which is being manifested in this type of automobile is growing every day. It is estimated that at least 50 new electrics will be placed in Portland between now and the Christmas holidays. People now realize that the electric is reliable and, in many ways, the ideal means of getting about in the city. The care necessary to keep an elec-

tric in good running condition is very slight, but there are details which should be looked after regularly if the slight, but there are details which should be looked after regularly if the maintenance bills are to be kept at the lowest figure. These details often are neglected, causing trouble and inconveniences that can be avoided if negligence does not rule. Give an electric one-tenth of the care required to keep a gas car in running condition and it will prove to be one of the best friends the owner could have. The battery, for instance, is the heart of an electric car and requires attention. The battery should be kept flushed, that is, the cells should be filled with water at intervals to keep the electrolyte, or fluid, over the top of the plates.

In this climate a flushing will last a week or 10 days. The time necessary to flush a battery, providing the cells are accessible, is about 15 minutes and can be done by an inexperienced person. The only caution necessary is not to overflow the cells.

The only caution necessary is not to overflow the cells.

The battery should be fully charged The battery should be fully charged but it is not necessary to charge a battery every time it is used. Sometimes a car is used but a few miles a day and possibly only one-eighth of the charged has been used. If the battery is charged every time it is used for short runs, the effect is the same as a man eating the effect is the same as a man eating the contract.

the effect is the same as a man eating ail the time. His stomach would seen get out of order. And so it is with the battery of an electric car.

It has been shown times innumerable that it is best not to charge the battery until the current is at least two-thirds exhausted. Keep the battery flushed, charge when necessary, according to the mileage of the car, and not only will the maintenance expense

In running the car much better service can be had by careful driving. In starting, be sure that the brakes are released before turning on the power and put on the power one point at a time. Many electric car drivers are not cautious of this, and go through the controller two and three notches at a time. This not only wastes current and reduces the mileage, but causes great strain on the motor, transmission and tires. Just a little care on this particular point will save many dollars and greatly increase the life, mileage and service of the machine.

States will demand that the Federal Government shall extend proper aid. Whatever may be the views of some, it whatever may be the views of some, it is a question that must inevitably be in course. Every section of the United States and Canada was represented in the gathering of 150 distributers, from No-valed to the output of 1912.

Every section of the United States and Canada was represented in the gathering of 150 distributers, from No-valed to construct the road itself, the money to construct the road itself, the output of 1912.

Every section of the United States and Canada was represented in the gathering of 150 distributers, from No-valed the output of 1912.

Every section of the United States and Canada was represented in the output of 1912.

Every section of the United States and Canada was represented in the output of 1912.

Every section of the United States and Canada was represented in the output of 1912.

Every section of the United States and Canada was represented in the output of 1912.

Every section of the United States and Canada was represented in the output of 1912.

Every section of the United States and Canada was represented in the outp

service of the machine.
In stopping, it is best to turn off the power 50 or 100 feet and coast to the destination, applying the brakes slightly when the car is stopped. This saves an undue strain on the car and un-necessary wear on the brakes.

Invariably, when an owner has be-come dissatisfied with an electric, the reasons therefor can be traced to neg-lect and carelessness on the part of the

or engine, invented by Charles Y.
Knight of Chicago, and the prominence of the cars in the ten teams as well as the individual machines that contested in the long, grueling competition, the honors at the end practically were exclusive to the Minerva-Knight entrants.

By virtue of performance and piston displacement the Postorial Proceedure. By virtue of performance and piston displacement the Belgium-made auto-

PACKARD FORCE HAS NEW HEAD

J. G. Vincent Assumes Charge of Corps of Engineers.

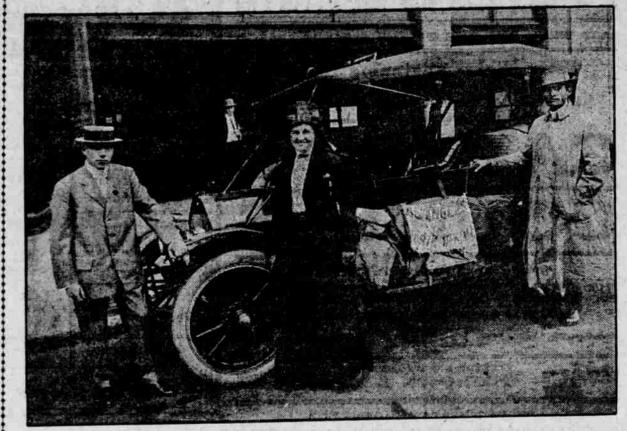
The Packard Motor Car Company has secured a notable addition to its en-gineering forces in the appointment of J. G. Vincent to the position of chief engineer. Mr. Vincent becomes the executive head of the active engineering corps, with its four subdivisions known as carriage chassis, carriage body, truck and experimental divisions.

Russell Huff, consulting engineer, and

Packard engineering work.

Mr. Vincent, formerly chief engineer with the Hudson company, was at one pany. He has a wide designer of motor cars,

LOS ANGELES-TO-NORTH-YAKIMA MOTORISTS WHO BOOST SIGNPOST ACTIVITY OF PORT-LAND AUTO CLUB.



FROM LEFT TO RIGHT THE TOURISTS ARE J. O. LAMB, MRS. H. F. DIERKER, H. F. DIERKER

Senators Favor Improvement of Nation's Roads.

IMPORTANCE POINTED OUT

Heyburn, of Idaho, Proposes System of Progressive Construction in Country So Highways Will Be of Permanent Kind.

National roads are coming in for receated reference in the Senate debates relating to the postoffice appropriation bill. It is evident that there is a constantly growing belief that the Federal Government before long should concern itself with the construction of trunk line roads, thus encouraging and making more convenient the great.

MITCHELL DEALERS PREDICT

few years ago cannot appreciate, says few years ago cannot appreciate, says axie shaft is of Carpenter shaft, cold-rolled steel. H. F. Dierker, of Los Angeles, who passed through Portland last Tuesday in his Overland "20" on the final spurt ported by a housing, which takes the weight of the car and its load off of trip. not only will the maintenance expense be very low but the battery will last much longer and give the best service.

There are various makes of batteries on the market, and in purchasing a car it is advisable to see that the battery equipment is of a reputable make, as this has considerable to do with the future service.

The motor of an electric car requires very little attention. The best makes of trunk line roads, thus encouraging and making more convenient the great flood of interstate travel, which, ac-

Heyburn is Favorable.

Senator Heyburn, of Idaho, believes:
"When the Government enters upon this class of work it should be for the construction of roads up to the standard of the highest use, not all at one time, but continuously and gradually; not roads one part of which would be worn out before the other was constructed, but a system of progressive construction that would result within a reasonable time in a system of permanent

Senator Lodge, of Massachusetts, con-Automobile Men Marvel.

Most recent of the strenuous European automobile races the Belgian grand prize over the Ardennes circuit, resulted in a tie between the three-car teams of the Minerva-Knight type and the Hormes machines. The two-day event comprised 12 rounds over the 30-mile course, a total of 729 miles for the two days. Because of the widespread interest among continental mo-

displacement the Belgium-made auto-mobiles, equipped with the American motor, came out of the wonderful test the wonder of the engineers.

Association's National good roads Among the contestants beaten by the Minerva-Knight were the Lion-Peugeot, of French grand prix victory fame; a Mercedes-Knight team, three Opals, three Benz and three Excelsiors and three-car teams of S. S. A. V. A., F. A. B. and Vivinus make. With only two grand prize Schneiders named, no complete team data was available on these machines. Besides there was a Germachines. Besides there was a Ger-man valveless, a Chartler, Rolland-Pilan, Hispano Suiza and a Ford. highways and to report at the earliest practicable date.

MOLER COLE WESTERN HEAD

Four Additions Made to Traveling Force of Indiana Firm.

In line with the policy of the Cole Metor Car Company to maintain the highest service for their owners, four valuable additions have been made to their traveling field force that add tone and strength to their service organiza-

C. J. Corkhill, a Middle Western auto-mobile man with long-standing reputa-C. J. Moore, manufacturing engineer, and both of whom have been with the Packard company since the bringing out of the first model, will constitute an advisory body having supervision over all Mr. Vincent, formerly chief engineer.

Mr. Vincent, formerly chief engineer the Huster country of the Huster country of the west and Canada on the north. He was a month of the man with long-standing reputation and continued to make the man with long-standing reputation and continued to make the man with long-standing reputation and the man with long-standing reputation.

If the man with long-standing reputation and the man with long-standing reputation and captured to make the man with long-standing reputation and experience, has been appointed assistant sales manager with head-and company since the bringing out of the first model, will constitute an advisory bedy having supervision over all Mississippi River on the east, the Gulf of Mexico on the south, and Rockles on the west and Canada on the north. He with the Hudson company, was at one time superintendent of invention with the Burroughs Adding Machine Company. He has a wide reputation as a designer of motor cars. tion in the territory west of the

Rockies up and down the Coast. Mr. Moler will make his headquarters with the large Cole distributers, but will do continual traveling among Cole agents. J. R. Hamilton, who has a reputation as a thorough mechanic, knowing the automobile from radiator cap to the tip of the rear spring, will be associated with Mr. Moler as the West Coast service expert. W. B. Lacer, who is a man with considerable experience in the automobile manufacturing game, is second Cole service expert added.

Howe's Force Increased. Fred N. Howe, manager of J. W. Leavitt & Co., is congratulating himself on taking away from the Leavitt branch in Seattle Robert Atkinson, one of the livest wires and best-liked salesmen along automobile row in the north-ern city. Atkinson arrived here last week to assume his new duties. Besides selling Overlands here, Atkinson will have charge of the advertising depart-ment of the local branch.

Latest Models.

RACINE, Wis., Aug. 17 .- (Special.)-One of the most enthusiastic meetings

these distributers, already overflowing with enthusiasm from past performances of the Mitchell product, viewed the 1913 model, displayed in its various forms, in the new salesroom at the factory, unanimously declared shifty to double their sales the com-

ing year.

During the session the distributer come dissatisfied with an electric, the reasons therefor can be traced to neglect and carelessness on the part of the caretaker of the machine or the work of the driver. A little, but necessary, care, and good judgment in driving, will make the electric an invaluable servant in business or pleasure.

KNIGHT MOTORS VICTORIOUS

ENIGHT MOTORS VICTORIOUS

American Engines Make European

Automobile Men Marvel. dence shown, and wished all present "bon voyage" on their return.

> POPULAR AUTOMOBILE SALES-MAN JOINS STUDEBAKER CORPORATION.



William G. Dunbar.

William G. Dunbar, a well-known and popular automobile salesman, will enlarge his field of activity by becoming associated with the Studebaker Corporation tomorrow. Mr. Dunbar was for several years factory repre-sentative of the Buick Automo-bile Company and later associated with the General Motors Com-pany. Since coming to Portland two years ago he has been a member of the sales force of the

Howard Auto Company.

A. H. Brown, manager of the Studebaker Corporation, says: 1
"It is my intention to maintain the most efficient sales organization." tion on the Pacific Coast, which is in keeping with the Studebaker policy, and I consider that I am particularly fortunate in secur-ing the services of Mr. Dunbar."

H. F. Dieker Passes Through Portland on Los Angeles-Walla Walla Trip-Pacific Highway Is Main Route Chosen.

"The sign post activity of the Port-land Auto Club has made motoring in Oregon a pleasure the autoists of a stallation of a floating rear axie. The

The motor of an electric car requires
The motor of the Senator Swanson, of Virginia, made this
Somator Swanson, of Virginia, made this
Somator Swanson, of Virginia, made this
for any good car, the number of tour
with the proposition whether the Fedwith the proposition only in one to
their several homes, firm in the belief
their several homes, firm in t

Every section of the United States and Canada was represented in the gathering of 150 distributers, from Nova Scotla to British Columbia and from Maine to California.

The policy of the company is "qualThe policy of the company is "qualThe policy of the company is "qualThe policy of the company is "qualThey have althe autoists through Ukiah, Eureka and Crescent City, then across into Oregon just below Grants Pass.

From Medford they made a two-day side trip to Crater Lake, which is a delightful trip this season of the year. with good riding all the way.

The party arrived in Portland Tuesday, stopping only a short time before resuming the journey to North Yakima and other Washington points.

FARMERS' RELIABILITY RUN AID TO GOOD ROADS

Ranchers of Texas Show Skill and Resourcefulness as Pilots in First Endurance Test.

That the farmer has the necessary mechanical skill, pluck and persistence to drive an automobile in a strenuous motor reliability contest was recently aptly demonstrated in the farmers' and ranchmen's endurance run in Texas.

The tour, promoted by a farm publication of Dallas, was the first of its kind and wholly devoid of trade influence, embracing a course of 700 miles from Dallas to San Antonio by way of Wasco and Austin. The return was via Taylor, Mexia and Corsicana. The contest was conducted under grade four rules, by which the contestants are penalized for being late at controls. All contestants were restricted to farmers and ranchmen owning their own cars, thus making it one of the most practical and popular contests

while, on the other hand, stretches were made up of deep dust and small sharp limestones and treacherous rocky ruts. It is greatly to the credit of the farmers who participated in this contest that more penalties did not re-sult. In one instance the bolts were sheared off the rear wheel of a car while rounding a sharp curve. The wheel bounded off into the field. The contestant borrowed the bolts of a cultivator from an obliging brother farmer, assembled his wheel and landed in night control shead of schedule. This is but one of the many instances in the run which showed the resourcefulness of the average farmer-motorist, who, from necessity, is used to working out his own repairs independent of garage

help.
"The result of the many enthusiastic "The result of the many enthusiastic meetings at the noon and night controls is sure to have a strong moral effect in bringing into line the counties in Texas that have hitherto been backward in voting for road improvement," says a Dallas paper. "The tour proved that the Texas farmer believes that good roads pay and when he decided upon a thing he usually gets what he wants."

A. D. Plughoff, general manager of the J. W. Leavitt Company, Harry L. Olive. of Spokane, Willys-Overland agent for the Inland Empire, and W. G. Northrup. district manager of the Willys-Overland Company in the North-west, are in Portland for a short visit

Howe Thinks Toledo Factory's Model Best Ever.

WILLYS' POLICY KEPT UP

Last Season We Thought Overland Designers Had Reached Last Thing in Moderate-Priced Car but All Outdistanced," Now.

Fred N. Howe, the man who is makng Overland automobiles popular in this territory, thinks the latest model turned out at the Toledo factory of John N. Willys is a world-beater in its class. It is a 30-horsepower, five-passenger, fore-door touring car, selling below the \$1000 mark, with factory equipment, including a self-starter, speedometer, top and boot, windshield, presto-lite tank, robe rail and tire-

holders.

"This is in keeping with the Willys policy of producing each year a model that is one of the sensations of the automobile world," said Howe, who watches over the destinies of the Oregon division of J. W. Leavitt & Co.

"Last season we thought that the Overland designers had resched the last thing in the moderate-priced car. Overland designers had resched the last thing in the moderate-priced car. In their Model 59 we figured that we had everything that could be given for the price. The new machine, Model 69, however, has its forerunner completely outdistanced. It will be one of the real sensations of the 1913 season. "The wheelbase on the year car has Tourists Praise Posts Put Up
by Portland Club.

Tourists Praise IN GOOD SHAPE

the real sensations of the 1913 season.

"The wheelbase on the new car has been increased to 110 inches, while the body has been lengthened and deepened, making the car have a more roomy and spacious appearance. All bright parts are nickel-plated instead of brass-plated, while the radistor is enameled in keeping with the body finish. The 32x3½-inch wheels are this year painted gray, with black striping and black hubs.

"The hood has been lengthened several inches, allowing the motor to set forward more than it did last season, which makes for greater accessibility. The tonneau is larger and the sides

The tonneau is larger and the sides have been raised nearly three inches

have been raised nearly three inches, making a better arm rest and riding in general more comfortable. With the lengthening of the hood more leg room has been acquired for those riding in the front seats.

"A noted improvement has been made in the braking system, an entirely new design being adopted. The contracting brake has an inside diameter of 13 inches and the brake shoe is two and a quarter inches in width. The expanding brake has a diameter of 13 3-8 inches.

of his Los Angeles-to-Walla Walla trip.

"A person who hasn't made the trip under the old postless order of things cannot realize how the sign posts, with their feeling of security from wrong roads, adds to the enjoyment of motoring.

"The roads are excellent, and if the rear springs are inclosed by a sheet metal housing instead of being left exposed.

land designers maintain that no opportunity for improvement.

"Other specifications on Model 69 are: Four cylinders, cast separately, with a bore and stroke of 4x4½ inches; water cooled, thermo-syphon cellular radiator; splash system of oiling for crank and cam shaft bearings; cylinders and timing gears oiled by Kinwood force-fed oiler; Schebler carburetor; center control; channel section, cold-rolled steel frame; front semi-elliptic springs, three-quarter elliptic rear; selective three-speed and reverse transmission, with annular bearings; drop forged front axle and 32x3½-inch quick, detachable tires."

Salesroom Lures Veteran Pilot.

Bert Dingley, veteran speed devotee of the land, has retired. Not just quit for the season, but stopped for keeps. He has raced from coast to coast and in foreign lands; has filted with death and repented in hospitals, to again return to the hazardous sport. But now he quits cold. He will be general sales manager of the National dealer in Los Angeles. His last race was the 500-mile event at Indianapolis.

DO YOU APPRECIATE SIMPLICITY IN A MOTOR CAR?

The White Self-Starting Six is the simplest and easiest to operate of all Sixes. The monobloc cylinder construction absolutely eliminates all manifolds and encloses all working parts of the motor in accessible, oil-tight compartments. The motor starts by merely pressing a switch, located on the dash. The motor cannot be unintentionally stalled. There are more reasons why the White is the most advanced car of the present day.

White Car Agency PORTLAND, OR., SIXTH STREET, AT MADISON.

FOR SALE

My Beautiful 20 H. P. Coupe



Not run one hundred miles. Going away. Will Sacrifice.

"SOUND JUDGMENT

Says: "Get a GOOD Electric Horn" We Have the Best

ARCHER & WIGGINS

Atterbury Truck

Columbia Carriage & Auto Works, Agts. Phone Main 2892.

209-211 Front Street. General Auto Repairing. Bodies and Wheels Built to Order.

Auburn Motor Car Co.

505-7 Burnside Street A 7339, Main 2674.

BALLOU & WRIGHT

Largest Stock

Automobile Accessories

M. & W., G. & J. and Hartford Tires, Monogram Oils

80-82 Seventh St., Cor. Oak. Portland, Or.



MOTORCYCLES

INDIAN AND EMBLEM BALLOU & WRIGHT, 80-82 Seventh Street, Cor. Oak

GASOLINE and OIL TANKS STORAGE SYSTEMS FOR PUBLIC AND PRI-VATE GARAGES. S. D. Stoddard, Representative, 305 Columbia Bldg. Main 1476.

Chanslor & Lyon Motor Supply Co.

PACIFIC COAST DISTRIBUTERS Stromberg Carburetors, Kelly - Racine Tires, Harris Oils

627 Washington Street, Portland SEATTLE, SPOKANE, SAN FRANCISCO, FRESNO, LOS ANGELES

JOHN DEERE PLOW CO.

Northwest Distributors, EAST MORRISON AND SECOND STS. Phones: E. 3887, B 1625,

THE MIGHTY MICHIGAN

MICHIGAN AUTO & BUGGY COMPANY 369-371 Hawthorne Avenue East 1421, B 1345

STEARNS. APPERSON.

NORTHWEST AUTO CO. F. W. VOGLER, President

617 Washington Street. Phones-Main 7179, A 4959. J. A. SPENCER-SMITH, Pres. and Gen. Mgr. H. C. HUNTINGTON, Sec. and Trees.

PORTLAND RUBBER 362-370 East Ninth Street, South Phone East 2146 WE RETREAD TIRES

PREER CUTLERY & TOOL CO.

Headquarters for Shop Supplies and Automobile Tools 74 SIXTH AND 311 OAK STREETS

Our Motto: "Quality and a Square Deal."

Western Hardware & Auto Supply Co. SEVENTH AND PINE STREETS.

Vulcanizing, Hardware and Auto Supplies. Phones: Main 8828, Home A 2016.



ALWAYS IN THE LEAD The Car of Preven Durability, Economy and Reliability.

UNITED AUTO CO. Phones-Main 4337, A 7171. 522-28 Alder Street.