DRIVES SUGGESTED TO CHARM GUESTS

Portlanders Want Memory of City Not to Be Dimmed by **Exposition Glories.**

"GO WHERE ROADS GOOD'

Columbia Highway One of Many Possible Routes for Admiring of Scenic Delight.

DRIVES THAT WILL IMPRESS FAIR, SUGGESTED BY PORTLANDERS.

"Anywhere the roads are good."
Columbia River Highway.
Willamette boulevard and back
by Linnton road.
Terwilliger boulevard.
Skyline boulevard.
Canyon road and thence to
Portland Heights.
Milwaukie avenue to the Waverly Golf Club.
Sandy road to Troutdale.
Along Base Line, Section or
Powell Valley roads.

How are we to impress on the visitor to Oregon next Summer who "stops Panama-Pacific Fair the beauties of

Multnemah County? Prominent men interested in the welfare of Portland are beginning to devise ways and means.

They realize that possibly 50 per cent of families in Portland will be entertaining guests at some time during the season, many of them from Eastern

In all the jumble of scenery, points of interest and memories of the West, how is Portland to be singled out in such a distinctive way that this city will be one of the illuminating thoughts of the trip when reminiscences are in order?

Job Ensy for Autolst.

For the man who has an automobile it would seem to be easy.

But the average man with an automobile desn't seem to find it so!

A representative of The Oregonian called up a large number of representative Fortlanders yesterday and asked them where they planned to take their visitors.

It is true they were not road enthusiasts, but they all owned machines; they all ilked to drive, but they could not formulate ideas just as to the location of accessible points of interest.

The non-autoist will find it possible this Summer to take his friends by auto stage runs to many points of interest, not the least of which is the famous Columbia River Highway run, which by the end of June will permit traveling to Cascade Locks.

Mr. Meier Knews 60 Reads.

Yet in the city proper there are very many accessible drives in excellent condition for autoists, while in the country about Fortland their name is almost legion. It is true they were not road enthu

try about Portland their name is almost legion.

"I discovered." said Julius Meier, discussing this fact, "that I could start out every day for 60 days and each day drive my friends over different roads, each of surpassing interest and beauty." Here are some of the suggestive drives offered by leading Portlanders: First of all, the Columbia River Highway! And to the citizen who has never traveled that wonder way let it be told here, so that he can retell and impress all the more his admiring friends just what the wonders of that much-to-be-famed highway are.

Columbia Highway Sights Many.

much-to-be-famed highway are.

Columbia Highway Sights Many.

All who have traveled over it in its infancy—and many of these have traveled in other countries where scenery is capitalized as being a definite cashvalue asset—declare there is no road in the world which offers so wonderful a vista to the traveler.

Perhaps that sounds too strong. Well, here are some of the most remarkable features—any one of which, for example, would be a meeca for tourlists in England or France:

Crowns' Point, Latourell Bridge and Falls, Shepherd's Dell, Bridal Vell Falls, Angels' Rest mountain, Mist Falls, Gordon Falls, the Multnomah Falls, the East viaduet which is 680 feet long and the West viaduet 410 feet; Oneonta Gorge, Horse Tail Falls, St. Peter's Dome and Catherine's Dome, Pierce Creek Falls, the Bonneville fish hatchery and park, and Eagle Creek Bridge, all of which are in Multnomah County.

Cascade Locks En Route.

Come now, Mr. Average Portlander, did you know that much Multnomah

Cascade Locks En Route.

Come now, Mr. Average Portlander, did you know that much Multnomah County geography?

Just a short run beyond the Multnomah County line are Cascade Locks, another unusual, if not a scenic place of interest.

But it can safely be said that the world has nowhere else to offer such a collection of mammoth waterfalls and mountain and gorge scenery as the 42-mile run along the Columbia High-way.

way.

It is suggested as a run for the city man, because, the road being new, it effers a quick out-and-return trip for a Summer's afternoon or evening.

Rock Work is Notable.

Longer trips, such as those to Mount Hood, have been discussed before in The Oregonian and will be again.

While taking the Columbia River Highway run, the visitor should have pointed out the unique Italian dry masonry on the many culverts and bridges and the fact that one of Portland's wealthy men, John B. Yeon, donated his time to the county to make the road a possibility.

In Portiand one may take the trip up the Canyon Road to the Summit, then bearing to the left steadily swing about Portland Heights and back to the city either by Montgomery Drive or by other routes.

The Linnton Road offers a fast trip, showing the lower harbor. The return Rock Work Is Notable.

The Linston Road orders a service who wing the lower harbor. The return may be made by the ferry to St. Johns and back by Willamette boulevard.

Milwankie avenue out to the golf links offers a fine hard-paved run for an hour or two.

City Routes Suggested.

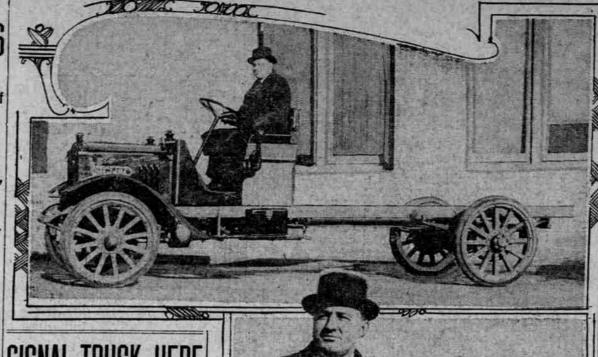
The Sandy road run to Troutdale is worth while.

Along the Base Line. Section Line and Powell Valley roads the visitor may be shown some of Multnomah County's intensive farming Interests. with views of Mount Hood.

Terwilliger boulevard is a short but spectacular trip starting from Sixth street, which gives one a complete vista of the East Side, just as the Willamette boulevard does the West Side. But, to sum it all up, the beauties are so many, that it is safe to take the visitor "anywhere the roads are good" as E. E. Coovert expressed it.

And he will go home with a memory, it this is done, that will remain in his mind after the giories of the exposition are dim and gone. Terwilliger boulevard is a short but

NEW TRUCK WHICH HAS MADE ITS DEBUT IN PORTLAND THROUGH OREGON MOTOR CAR COMPANY.



Oregon Motor Car Company Has Demonstration Car.

TON AND HALF IS CAPACITY

Worm Drive and Brown Rear Axle Are Features in Which Newly Appointed Distributors Put Faith for Sales.

The Oregon Motor Car Company has recently been appointed the distributor for the Signal Truck, a ton-and-a-half size of which arrived in Portland during the week. S. S. Gilbert, a truck man who formerly was in the business in Chicago, is handling the trucks for W. C. Garbe, manager of the Oregon company.

W. C. Garbe, manager of the company.

The particular feature of which the local men are most proud is the worm drive and the Brown rear axle.

In many ways the truck resembles the Signal one-ton machine except that it is much heavier and has heavier axles and transmission, proportionately.

transmission equipment. All plates are of tempered raw steel, being faced with Haybestos and driven by eight large diameter pins mounted in spider which is bolted to the fly-wheel.

The truck has a general air of simplicity, but looks very rigid. The frame, brakes, control and other deframe,

talls measure up to the standard set by the parts enumerated. The drive is through the springs.

HIGHWAY WORK NEARLY DONE Woodland Reports Progress in Surfacing to Hayes.

WOODLAND, Wash., Jan. 23.—Hayden Brothers and Bidwell, who have the contract for surfacing more than two miles of the Pacific Highway from the east approach of the steel bridge across the Lewis River towards La-

across the Lewis River towards LaCenter, have completed their contract,
which is a few days later than they
expected on account of the excessive
rains and cold weather.

A miscalculated blast wrecked the
sheds over the crusher and boller
house. Crushed rock is being furnished
Clark County. A rock road is being
built to Hayes, about four miles above.
Woodland.



The Portland Automobile Dealers' Trade Association is entitled to a great deal of credit for the public spirit they have displayed in devoting about one-half of the ballroom in the Armory during the automobile show to an educational good roads exhibit, featuring the Columbia highway. In this room, which houses the automobile accessories exhibit, a space has been pro-

sories exhibit, a space has been provided for a good roads exhibit.

The walls of the room are hung with some of the mammoth paintings which have been prepared for the Columbia highway exhibit in the Transportation building at the Panama Exhibition. Several of these have been completed and are installed that Portland people may have the pleasure of seeing them before they are sent to San Francisco. These paintings are the work of

before they are sent to San Francisco. These paintings are the work of Fred A. Routledge, who, in addition to being an artist of unusual ability, has the advantage of knowing the fartire country from the seashore to Hood River and Mount Hood, having tramped over every foot of the ground. This close acquaintance with his subject has enabled him to paint from the heart and the productions are pronounced by critics to be remarkably true. critics to be remarkably true.

Pamous Points Are Shown. The paintings which have been com-pleted and installed in this room con-ported fustic wo sist of a large one measuring 30 by 15 low for textiles.

HUPMOBILE MAKERS AT THE FACTORY SCHOOL, WHERE THEY ARE LEARNING THE FINE

POINTS OF ALL DEPARTMENTS.

The particular feature of which the local men are most proud is the worm drive and the Brown rear axie.

In many ways the truck resembles the Signal one-ton machine except that it is much heavier and has heavier axies and transmission, proportionately.

Splash System is Used.

The motor is a Continental 3% x5% rated as 22.5 by the S. A. E. formula, it is constructed with the three-point is usension and has a governor, water pump and fam. The splash system of ilubrication is used.

The interpolation is used.

The interpolation is accomplished with the Eisemann, high tension truck type and all cables are doubly protected by means of fiber insulators. The Stromberg truck type carburetor with hot air, intake from exhaust is used on the machine.

The cooling is of the built-up truck type, having vertical tubes with fins in the cooling section. Top and bottom tanks and sides are supported by heavy iron frames and castings.

With Vivid Realism, Bringing Out Many Famous and Beautiful Spots Gracting Route.

The radiator is mounted on dropper front members of the frame and is unaffected by the weave of the side rails. The transmission is of the standard selective type. High gear is direct by means of jaw clutch. Gears and shafts are 3.5 per cent rickel steel.

A multiple disc clutch completes the framesmission and plates are of the provided by public subscription, the greater portion of which is already assured. In the railsing of the funds required for this work prominent business of jaw clutch. Gears and shafts are 3.5 per cent rickel steel.

A multiple disc clutch completes the framesmission equipment. All plates are of the provided by public subscription, the greater portion of which is already assured. In the railsing of the funds required for this work prominent business of jaw clutch. Gears and shafts are 3.5 per cent rickel steel.

A multiple disc clutch completes the framesmission equipment. All plates are of the provided by public subscription, the greater portion of which is already assured. In the railsing of

There are also large and numerous photographs of the beauty spots along the Columbia highway and another painting of a section of the highway

showing proposed improvements along the Columbia River.

In this room will also be shown every evening except Monday during the show a series of views along the Co-lumbia highway, shown and explained lumbia highway, shown and explained by S. C. Lancaster, consulting engineer for Multnomah County, who laid out this famous highway. These stereop-ticon pictures are beautiful hand-col-ored slides, many of them being in the new natural color process showing scenes along the Columbia in beautiful Autumn tints and in a way never be-

Attumn thats and in a way never be-fore shown.

This entire exhibit is purely educa-tional and is a part of the automobile show without any additional cost, and will be enjoyed by many who may not be interested in even seeing the motor cars themselves.

Osage orange wood is a source of dye nd can be used to supplement the im-orted fustic wood, as a permanent yel-

FEDERAL

MOTOR TRUCKS

- WITH -

WORM DRIVE REAR AXLE Represent the Utmost in Transportation Service

TEARS of successful service have proved how Y successfully FEDERAL Motor Trucks have fulfilled the demand of the commercial world for an efficient, sturdy, dependable, economical means of transportation. In the service of some of the world's largest

users of transportation, as well as in the service of concerns who require but one or two trucks,

the FEDERAL has always made good. It has

never been an experiment.

It rapidly became known all over the world as the "Truck Triumphant," and in addition to the extensive use of FEDERALS in the U. S. A., these trucks are being used in foreign commer-cial fields and in huge fleets by foreign govern-

On the Pacific Coast, where conditions are extremely hard on motor trucks, the FEDERAL has demonstrated its real ability in a forceful manner. Over 700 FEDERALS are operating now on the Pacific Coast.

All the sturdiness—all the dependable and efficient service-giving qualities of the double chain drive FEDERALS—which the Federal Motor Truck Co. still continues to manufacture at Detroit—are combined with the silence, cleanliness and long life of the worm gear drive FEDERALS.

It is not a new truck—but merely a change in the finni method of drive. Aside from the change in final drive, the same engineering principles that have made the FEDERAL Chain Models such a success are retained in this new model. The capacity is the same-3000 pounds.

Because of its silence, cleanliness, simplicity and long life, the worm gear drive truck has long been a favorite for hotel service, ambulance work, bus lines, bakeries, department and furniture stores, etc., as well as in most other lines of business.

Worm gearing retains full efficiency as long as it lives, and it lives longer than any other form of drive. Tests and actual service have proven the worm searing used in the FEDERAL to be highly efficient—and it actually grows better with

Worm gearing is dead quiet and stays quiet-

form of drive—is the simplest drive, easiest to operate and least expensive to keep in repair. It gives a smooth, uniform drive, with great pulling power.

Greater efficiency is obtained over other forms of power transmission because of entire freedom from dust, dirt or chips and because of the perfect lubrication possible.

You can investigate the new FEDERAL Worm Drive Truck thoroughly at our service station. And it is worth the time of any business mun who is confronted with haulage problems to make this investigation.

Chassis Price \$1900 F. O. B. Detroit BODIES EXTRA-BUILT TO YOUR INDIVIDUAL REQUIREMENTS

Gerlinger Motor Car Co.

EMPLOYES ARE TAUGHT the

EDUCATION IN EFFICIENCY METH-ODS IS PROVIDED.

portant as Any Other Department of Auto Factory.

The education of shop employes in efficiency methods has for the past year or two commanded the attention of the entire industrial world. manufacturing establishments in various lines for a long time have had
their factory schools, where employes
are drilled to work with precision,
safety and in a manner which will be
to the employe's own advantage.

One of the first automobile manufacturers to see the light of educa-

One of the first automobile manufacturers to see the light of educational work, its benefits not only to the employe, but also to the factory and factory product, is the Hupp Motor Car Company, which recently established a factory school, open to all their employes.

It is the opinion of S. H. Humphrey, manufacturing manager, that it will not be long before the factory school will be as important a part of an automobile factory as any of its other departments.

departments.

departments.
"Our idea in opening the factory school," said Mr. Humphrey, "is to teach our men to become efficient mechanics, to show them the fundamental principles back of motor-car designing, to give them reasons for accurate and careful workmanship and to make them more valuable to them-

elves.

"This mechanical school will be a big benefit to every man who attends. We teach them the principles of motor-car construction, how to read blue-prints, the functions of the different prints, the functions of the different parts of the engine, their relation to each other, why it is necessary that each man stick to his job and that we have no shirkers and the results of shoddy work after the car is on the

"Right here is where I think we

"Right here is where I think we will accomplish our biggest aim, for if we can show the mechanic why it is necessary that we have accurate and careful workmanship in every part that is placed in the Hupmobile we will be able to say without hesitancy that it would be impossible to build Hupmobiles better.

"The school is in charge of R. G. Blaine, son of the noted professor of mechanical devices at Belfast and a graduate of Edinburgh University. Mr. Blaine, besides being an expert mechanician, has had a liberal education along mathematical lines. He is an ideal man to have in charge of such a school.

"Our idea is to hold meetings twice a week, and we shall have experts to talk to our men at frequent intervals on different subjects.

"It is the aim and object of this company to build Hupmobiles in the best way possible, and for this reason the thorough education of our employes is of utmost importance. I know that this school is going to bring us big results, for in the short time the school has been in operation—only a little over a month—its effect throughout the factory has already become evident."

FORD STATIONS EVERYWHERE

1.000.000 Cars Soon to Be in Use and Parts Always Obtainable.

With the completion of the 300,000-car schedule August 1, 1915, there will be 1,000,000 Ford cars in operation. A million Ford owners mean Ford dealers in proportion. There are nearly 6000 Ford dealers. And in the hands of these Ford dealers is kept a stock of Ford parts aggregating about \$12,000;-

The ratio of Ford owners as com-pared to owners of all motor cars is shown, for example, by California, Iowa

and Florida, three extreme points in the Union. More than 50 per cent of all the automobiles owned in these three states are Fords, and there are 113,000 cars in Iowa. too. There is impossible for a Ford driver, any-ingrater New York City and vicinity there are Ford branches in Long Island City, Brooklyn, the Bronx and Newark.

All these stutemendous figures, 1,000.

MASTER CARBURETORS

REDUCE FUEL BILLS

15[%] to 35[%]

Sold on 10 days' trial-subject to return

NO ADJUSTMENTS, SPRINGS OR GASKETS BURNS DISTILLATE AS WELL AS GASOLINE

FOR AUTOS, BOATS and AEROPLANES

Most economical carburetor made. All the late world's records taken with the Master.

The U.S. Government specifies the Master for all aeroplane work

ARCHER AND WIGGINS Oak Street, Corner Sixth.

Diamond Non-Skid Tires. Automobile Supplies.

Chandler Light Six

Built for hard work at the smallest possible expense.

Price \$1700, Fully Equipped F. O. B. Portland

See the Stripped Chassis at the

Dulmage-Manley Auto Co.

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