

## LONG-EXPECTED NEW CLEVELAND SIX HERE

First Car Received by Twin States Motor Car Co.

AND IT'S A LITTLE MOOSE

Though Built in Separate Factory, by Separate Organization, It Has Backing of Chandler.

The Cleveland six, a car talked about for months, arrived in Portland last week. It is on display in the sales rooms of the Twin States Motor Car company, Sixteenth and Alder streets, which will handle the distribution of this new car for Oregon, in conjunction with the Chandler and Roamer.

Motor car dealers, owners, prospective owners and motorists in general have taken unusual interest in the new Cleveland six. Its arrival has been the signal for a flock of interested persons to give it the once over. This is due to a certain extent to the fact that the same men who make the Chandler are behind this new light six. In fact, it has already been called the "little brother of the Chandler." Though there is a close relationship between the companies building the two cars, they are manufactured by entirely separate organizations in different factories. But it means a lot to the public to know that the same policies that have made a success of the Chandler are behind the Cleveland.

**Chandler Engineer Designer.**  
A fact not generally known is that the Cleveland is designed by Y. Whitbeck, the same engineer who designed the Chandler. Two years ago when A. H. Kraus, of the Twin States Motor Car company was at the Chandler factory, he took a ride in the first experimental Cleveland chassis. At that time it was the intention to have the car ready for production much sooner than has been the case. The war intervened and its initial appearance had to be postponed.

The Cleveland has its own motor, an overhead valve six, made in its own factory. It is a detachable head unit with cylinders cast in bloc. The whole motor is inclosed, making a very compact and neat-looking job.

A feature is the use of a hot-air stove to warm the air before it is brought to the Stromberg carburetor, from which the mixture passes through the engine block, thus providing plenty of pre-heating and adapting the motor to use of low-grade fuels. Unusual gasoline economy is claimed for the car. The ignition, starting, steering motor and generator are on the right side and the gasoline system on the left side of the motor, reducing the risks from fire.

**Pressure Oil Feed.**  
Oiling is pressure feed through a hollow shaft to the main and camshaft bearings. An oil lead is also carried to the chain case, these leads being supplied by a gear pump in a sump at the rear end of the pressed steel oil pan and driven by spiral gear off the end of the camshaft. An oil pressure gauge is carried on the dash. Lubrication of pistons and other motor mechanism is by splash.

Pump cooling is employed in connection with a Mayo radiator. The water pump and fan are driven by an endless V belt off the generator shaft. The cooling system has a capacity of three gallons.

Hitchhike drive is used, the rear axle being a floating type with some important features of accessibility. The pinion shaft assembly, for instance, is a unit, being mounted on two Tinkin bearings in an independent carrier screwed into the axle housing.

A special feature of the braking system is the use of a transmission hand brake with the service brake, a contracting type on the rear axle. Semi-elliptic spring suspension is used, with 32 1/2-inch fronts and 52 1/2-inch rears. The tires are 32x, with Firestone rims.

**Transmission Hand Brake.**  
Equipment includes "one-man four-haw" top, Johnson curtain lights, nickel-bound, ignition lock and the usual tool equipment.

The Cleveland is handsome in design. The body of the car is finished in Cleveland blue. Hood, fenders and running board are in black enamel. The upholstery is hand-buffed, bright finished, long-grain leather. Wheels and chassis are in black.

The car comes in four models, touring car, roadster, sedan and coupe. Mr. Kraus expects a shipment to supplement the present demonstrator in the next couple of weeks. Incidentally, this demonstrator will be on exhibition this week at the Salem state fair automobile show.

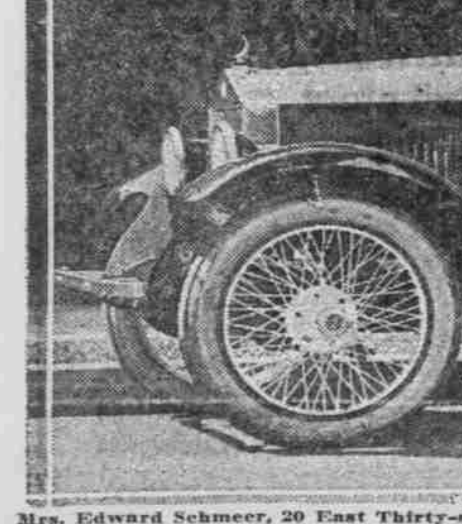
The Cleveland is very roomy, yet its shipping weight is only 2400 pounds. Its six-cylinder high-speed motor is remarkably peppy and powerful.

**TRACTOR TESTS ARE ARRANGED**

Demonstration to Be Held by Kittitas County Farm Bureau.

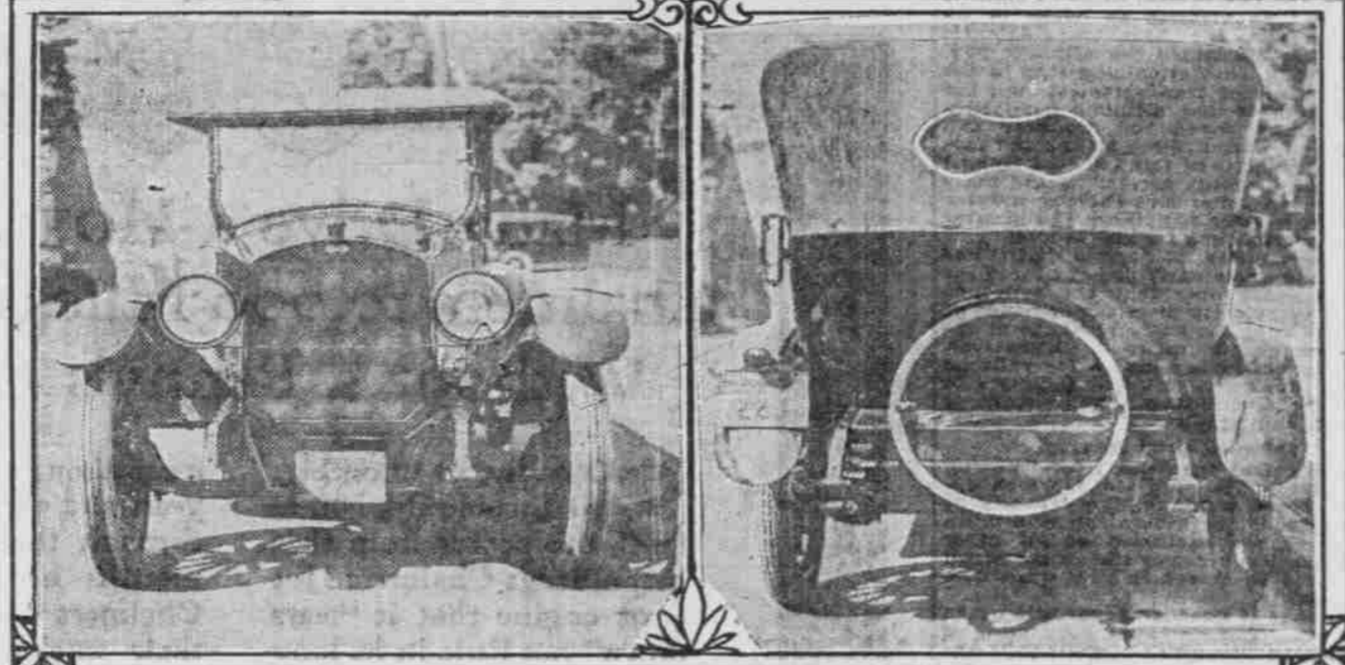
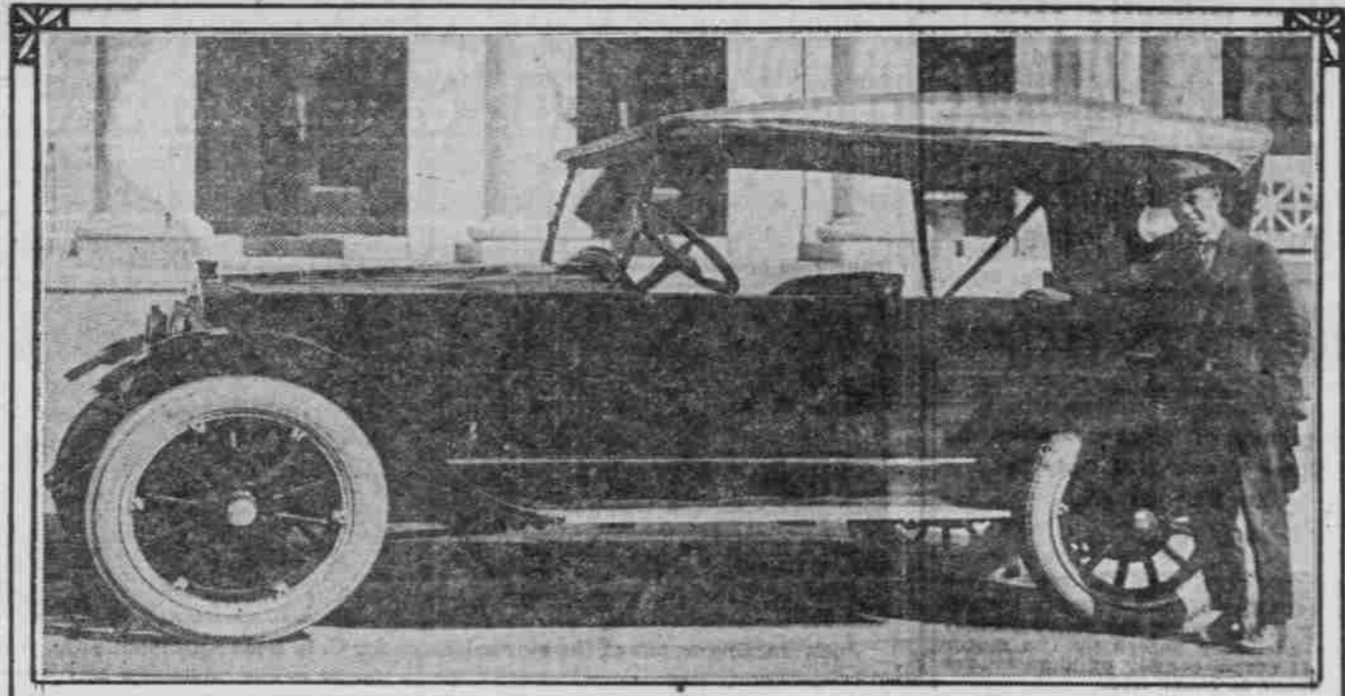
ELLENSBURG, Wash., Sept. 13.—A tractor demonstration and competitive plow test arranged by the Kittitas county farm bureau will be held October 1 at the C. C. Peterson ranch near here. The demonstration will consist of practical work of tractors in every field of farm labor. Ten firms have already entered tractors for the demonstration.

**WHO WOULDN'T BE HAPPY WITH SUCH A CAR AS THIS NEW VICTORY MODEL MOON?**



Mrs. Edward Schmeck, 20 East Thirty-second street, is the first woman to own one of them on the coast. Her husband made her a present of this one, which was the first of the new Moon models received here by the C. H. S. company.

CAR OWNERS AND PROSPECTIVE OWNERS, MEET THE NEW CLEVELAND SIX!



THIS CAR, WHICH IS VIRTUALLY A BABY CHANDLER, WILL BE HEARD FROM A LOT IN THE NEXT FEW MONTHS. HERE ARE THREE VIEWS OF THE FIRST ONE TO REACH PORTLAND.

This demonstrator reached the Twin States Motor Car company last week from the Cleveland factory at Cleveland, O., and will shortly be followed by other shipments for immediate delivery. Note the pleasing lines of the car, as shown by the photographs. Above is a side view of the Chandler, with A. H. Kraus of the Twin States Motor Car company beside it. Below to the left is a front view, and at the right a rear view. Just as the Chandler has its own individual name-plate and rear window symbol, so has its smaller brother, the Cleveland, as you can see from the picture. Any time you see this design on name-plate or rear window you'll know it's a Cleveland, and you'll see it often in the near future.

### DEMAND FOR TIRES BRISK

AUSTRALIA FINE MARKET FOR AMERICAN CASINGS.

65 Per Cent of Tires Used in Island Continent Said to Come From America.

Of all the tires imported into the great island continent of Australia, 65 per cent are American made. This is the statement of Charles Duval, who controls the sale of Goodrich tires and accessories in the Antipodes country. He recently visited Akron as the guest of F. E. Titus, foreign sales manager of the Goodrich company.

Discussing foreign trade and business conditions, Mr. Duval said that although Australia is moving forward with great strides in industrial development, he marvels at the achievements of America. He was amazed to find that cities the size of Indianapolis, Detroit and Pittsburgh possess more automobiles than the entire continent of Australia. Mr. Duval said the last registration of cars in Australia showed 50,000.

"My country, like America, is planning an extensive system of national highways," said Mr. Duval. "We are not as far advanced in highway building as you in America, but during the next five years \$20,000,000 will be spent in road work, half of this amount to be raised by the various states of Australia. In Victoria alone there are 1000 towns with absolutely no railroad communication and the people are dependent on motor vehicle transportation."

"The cost of motoring is considerably higher in Australia than in America. Cars and tires cost twice as much as here and when I left home gasoline was selling for 85 cents a gallon. Although wages are not quite as high, the cost of living is considerably lower."

"America has made marked progress in her foreign trade methods during and since the war. There has been more of a tendency on the part of American manufacturers to deal direct with their foreign customers, rather than through an export house. Direct dealing is more satisfactory in every way. It means cheaper rates, faster service, closer contacts and warmer friendships."

"The downward trend of English exchange which makes a pound sterling worth \$4.36 as against \$4.86—representing a discount of about 10 per cent—has a confusing effect on business and is a serious handicap for American trade with England and her colonies. But in face of this fact American-made

goods are popular with Australians and we are willing to sacrifice the difference for better quality. American cars, tires and automobile accessories are holding their own with those made in England and Australia."

Mr. Duval maintains a large sales force and has branch houses in Sydney, Brisbane and Melbourne. He left Akron for New York, where he will stay for two weeks before returning to Sydney via England.

### INDIANA SELECTS CONCRETE

Contracts Awarded in One Day for 54 Miles of Pavement.

Recently the Indiana state highway commission, which came into existence as a result of recent state legislation, received bids for 54 1/2 miles of highways. Contracts were awarded the same day for the entire mileage—all for concrete. This work is divided into eight separate contracts totaling 579,374 square yards and involves an expenditure of \$1,891,669.55. Indiana already has a large mileage of concrete roads.

### NASH FOUR IS ANNOUNCED

COMPANY TO BUILD FACTORY AT MILWAUKEE.

Entirely New Car Will Be in Production Within the Coming Twelve Months.

The Nash Motors company is to build a four-cylinder car in a plant to be constructed in Milwaukee. Transfers of 41 acres of land at Clement street and Oklahoma avenue, Milwaukee, have been made to the Nash Motors company and contractors are ready to start work without delay.

The Nash Motors company is also making substantial additions to its main factory in Kenosha, where Nash six-passenger cars and Nash trucks will continue to be built.

Work on the Milwaukee buildings will be completed within the next 12 months. It is planned to bring its production as early as possible up to the passenger car production of the Kenosha plant.

The buildings now planned include a power plant, foundry, machine shop, drop forge, body-building plant and sheet metal plant. Immediate expenditure of \$1,000,000 is planned by the company and it is declared that several times that amount will be expended in development of the Milwaukee plant as rapidly as the plans are worked out.

### DOUBLE EXHAUST IS USED

LEXINGTON OBTAINS BIG INCREASE IN POWER.

Double Moore Exhaust System Found by Test to Give Gain of 22 Per Cent in Power.

It is the simple things in motor car construction to a great extent that have increased its efficiency to the present high standard of today.

The value of simplicity is most forcibly demonstrated on the Lexington cars in the application of the Moore multiple exhaust system, a system used only on the Lexington.

Isaac Brunson of the Brunson Motor Car company, speaking of the value of this simple application of two exhaust pipes to the six-cylinder Lexington engine, says: "The Moore system is so arranged that only one cylinder exhausts in the manifold at the same time."

"In a six-cylinder engine two cylinders always exhaust at the same time and with the single exhaust pipe it has been found that in the fast-moving engine there is always a back pressure with a single exhaust pipe. With the Moore double exhaust this does not happen."

"What extent this back pressure has upon reducing the power of the engine may be appreciated that in the test in the Lexington factory, where Moore is one of the engineers, it has been found that the double system over the single system increases the power of the engine 22.8 per cent."

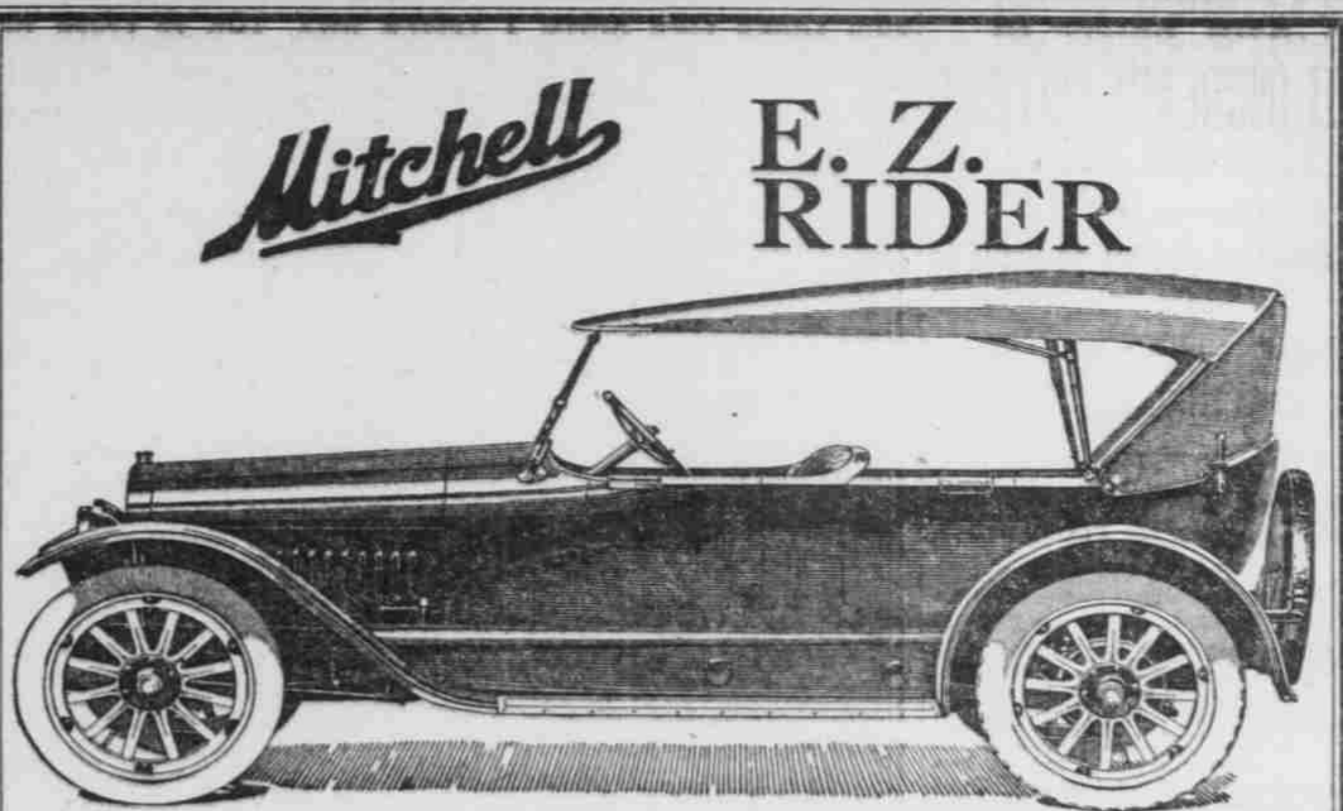
"If for no other reason this would be enough to cause its adoption, but it has also been found that with the double system the amount of carbon is decreased and a longer time between grinding of cylinders necessary."

### KELLY CLOSES BIG CONTRACT

Four of Largest Companies to Use Kelly-Springfield Tires.

The Kelly-Springfield Tire company has closed contracts with four of the largest automobile companies in the country which will increase its business between \$10,000,000 and \$18,000,000 annually. The contracts include: (1) Packard Motor Car company for standard equipment for passenger cars and trucks; (2) Federal Motor Truck company for pneumatic tires exclusively; (3) Winton Motor Car company, standard equipment for passenger cars; (4) White Motor Car company, standard equipment for passenger cars.

The company was able to contract for this large amount of new business by reason of the fact that work



## The Perfect Light Six—

Few radical changes have been made in the new Victory Model Mitchell Six as compared to the Mitchell Light Six of the past few seasons.

Improvements have been in the nature of refinements and perfecting of existing design.

Riding comfort could in no way be increased. Ask any Mitchell owner and he will tell you that he has never ridden in a car that rides so easily as his Mitchell. So Mitchell Springs remain the same, in the front semi-elliptic with rebound plate and in the rear long cantilevers that are uniquely hung.

The Victory Six is a car of increased strength. The frame is deeper and more rigidly cross-braced. The body frame is of more sturdy material with the result that annoying squeaks and rattles have been almost entirely eliminated.

Contrary to usual opinion the material used in the manufacture of the new Mitchell is better than ever before used. Inspection is more thorough. Parts that require close fitting, such as pistons, bearings and the like are given much attention, more than has ever been attempted in the Mitchell factory and we venture to say in any other factory building a car of the Mitchell price.

SEE THE NEW MITCHELL AND JORDAN SIXES AT THE STATE FAIR

Costly machines have been installed to insure perfection in the fit of parts.

The most notable change in the new Mitchell is the adoption of the Borg & Beck Dry Plate Clutch and a full floating rear axle that is equipped with oversize differential gears and axles. In fact, transmission gears, driving shafts and the like are all over strength.

In addition to the usual Mitchell equipment, such as a power tire pump, reversible head lamps, etc., the new Mitchell has a thermostat for regulating the temperature of the water in the cooling system.

Body lines have been raised and a new and effective color scheme increases the charm of this beauty six.

Come and see the new Mitchell. Ride in it, drive it, see if it does not measure up to your own ideas of the ideal light six.

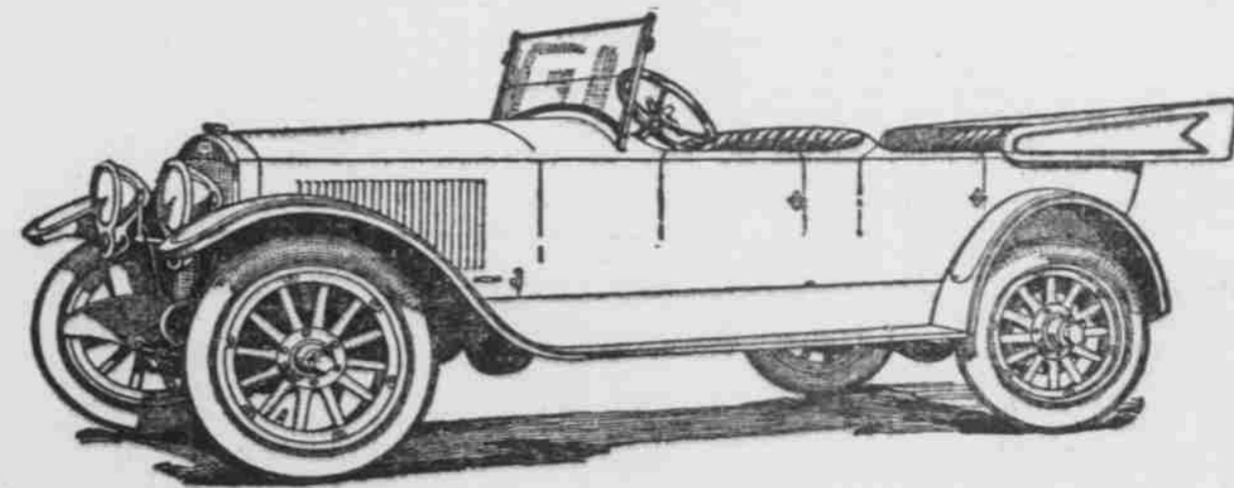
## Mitchell-Lewis & Staver Co.

Pacific Northwest Distributors, BROADWAY AT OAK, Portland, Or.

on the new plant in Cumberland, Md., is being rushed and will be in operation shortly. This new plant will permit of practically double the present manufacturing capacity.

**Cleaning Rear Axle.** The gum and grease that accumulate on the rear axle may be easily cleaned with a cloth wet with kerosene. A stiff brush will reach the grooves and corners, and the cleaning will be easier if the kerosene is warmed.

**Brush for Chassis.** In cleaning small parts of the chassis, such as the oil holes on brake cross-shafts, brake connections, etc., use an oil can filled with kerosene and a stiff brush. In this way the kerosene in just the proper amount can be directed just where it is needed. This method is particularly useful in cleaning out oil holes which have become partly filled with dirt.



See It at the  
**SALEM STATE FAIR**  
September 22 to 27, 1919

Some territory open for good, live dealers

## AUTO SALES CO.

Distributors

Ninth and Couch Sts.

Portland, Oregon

Don't Wash Your Car, but Have It Simonized

Portland's only authorized Simonizing Station.



Oregon Distributors for Simons Products

A. G. PEARD  
M. A. WURZWEILER  
Owners-Managers

THE SIMONIZING STATION  
175 21st Street

Next to Covey Motor Co.  
Marshall 3982—A 7901