

WASHINGTON AND OREGON TAGS ARE MADE IN PORTLAND

Process of Manufacture Is Highly Interesting From Start to Finish; New Plates Are Green.

Who makes the automobile license tags? How is it done? These questions are uppermost in the minds of curious automobile and truck owners this time of year, when their good money paid for the privilege of operating their vehicles during the coming year, they receive long slim envelopes from the secretary of state from which pairs of tags are pulled in all their verdant glory.

The Irwin-Hodson company, printers and lithographers, have for the past five years made license tags for the Oregon automobile owner. This year they are also making license tags for the state of Washington. One hundred tons of steel is being used for Washington and 75 tons of steel for Oregon. Enameling Washington tags will require 2500 gallons of enamel, while Oregon tags will be covered with about half that amount. Nearly two carloads of Washington tags have been shipped, while some 80,000 regular sets, 4000 motorcycle sets, 1000 dealer sets and 4000 chauffeur tags have been shipped to Sam Koser at Salem.

About 24 hours' time is required to make a tag from the time the small plate is cut from a sheet of steel until it reaches its carton for shipment. During the process it passes through a score or more hands and is treated to various and sundry changes necessary to convert a mere piece of metal into a tag appropriate for Missy's limousine, Mike's two-ton truck or Sam's junk chariot.

The steel comes in sheets 28x73 inches. These sheets are sliced in much the same manner as chocolate fudge into long strips, which in turn are cut into shorter strips of the necessary size to carry a license number. In the case of Oregon licenses, these strips are stamped one at a time by a heavy press with two sets of steel dies. Washington tags are stamped two at a time with one set of dies by a hammer weighing 500 pounds dropping two feet. Both stamping operations strengthen the plates by bending those for Washington and turning up the edges on those for Oregon motor cars.

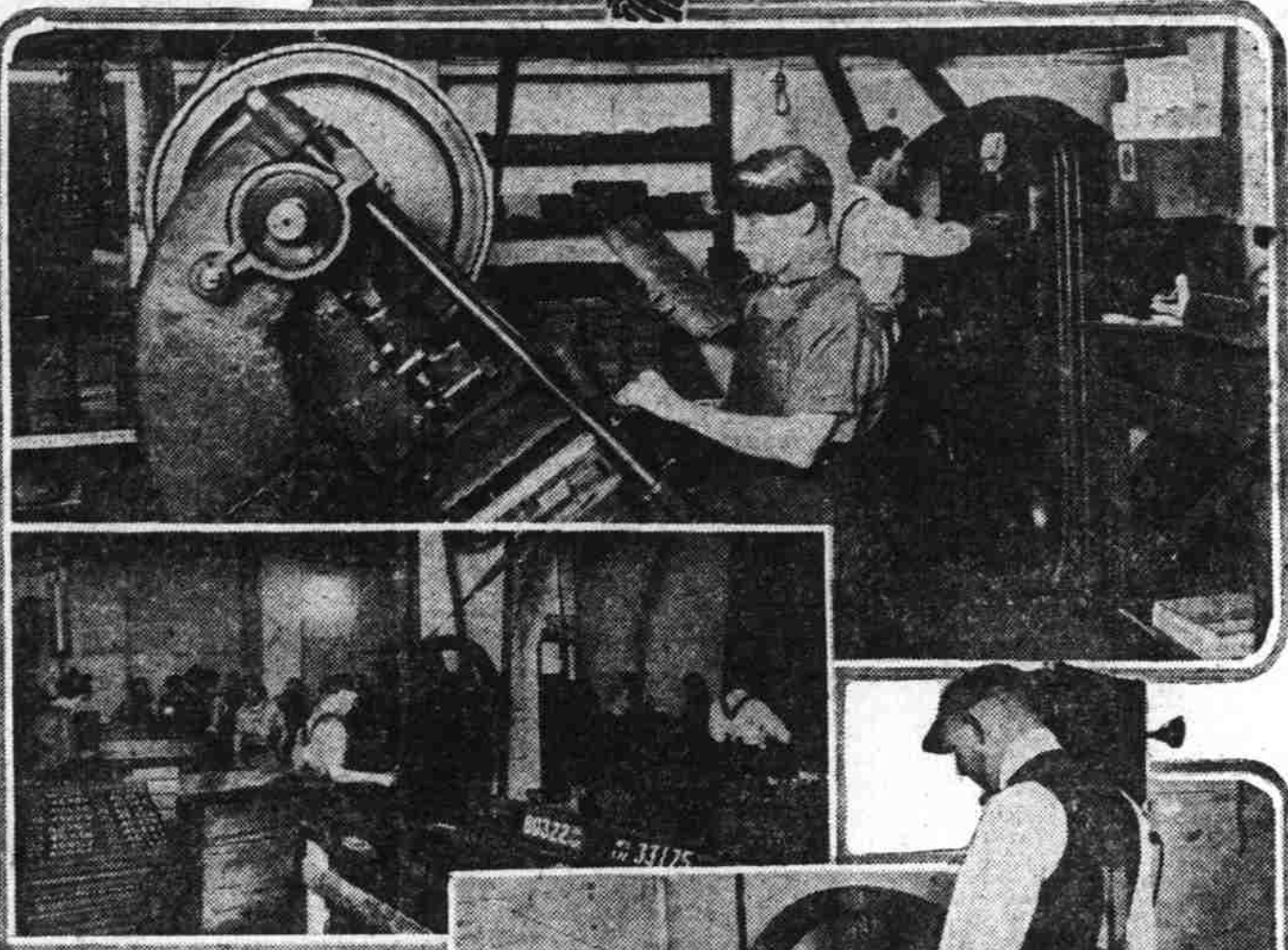
In the latter case, these plates are then put through another machine which turns the edges down, greatly strengthening the plate and making it less easy to bend. Oregon plates are made of 24 gauge steel, while those for Washington are fabricated from a lighter 27-gauge steel. The Oregon plate is one of the best any state is ordering this year and will cost per pair about 21 cents. Washington plates are costing that state 16 cents a pair.

GO TO PAINTING ROOM
After the numbers are stamped in the steel, the edges finished and the holes for fastening cut, the plates go to the painting room. Here a primer is put on the back of each plate as it lies on a tray, and the oven has its turn. The primer is hardened, and then the trays bearing the plates are brought forth and sprayed on the facing with enamel. The man doing the spraying takes the tray into a cavern-like booth and shoots the enamel from an apparatus that looks like an automatic pistol with two rubber tubes connected to the butt. Then to the ovens again, where a temperature of about 260 degrees bakes the enamel from three to four hours, and then we have a finished, shiny green plate for Oregon and a brown one for Washington. Next comes the sorting over, for each plate has to be just so. The bad jobs are taken out, the plates taken off the rack, and the most interesting part of the whole performance is about to commence.

Back in one corner of the paint room is a little machine with paint rollers very much like a printing press. This machine is run by electricity and has an electro magnet to hold the plates in place while the white-paint rollers run over the letters. A small cam makes and breaks the electrical connection, giving the operator a chance to pick the plate from the magnet. While the current is in force, through the magnet the plate cannot be removed.

PLATES ARE SORTED
When the letters have been painted, the enamel is baked and then all is ready for wrapping. In the old days

LICENSE PLATES IN COURSE OF MANUFACTURE



this lettering was done by hand. A man and a woman on the press now do more work in an hour than five men could do in two days with the hand method. Fred Bronner, department superintendent, who has been with the company 29 years, and is now in charge of this plate work, remembers those days well.

In the wrapping room a number of young women sort out the plates, put pasteboard between them, and pair them off. Others take the plates, wrap them neatly in waxed paper and pass them on to a man who fills the cartons and glues the covers on. The office of the secretary of state puts the plates in envelopes and mails them to the licensees. These envelopes are also printed by the Irwin-Hodson company, a hand press on the first floor taking care of thousands. Washington tags 240,000 regular automobile and truck sets this year, 6000 motorcycle sets and 3000 dealer sets. Oregon needs 120,000 regular sets, 4000 motorcycle sets, 1000 dealer sets and 4000 for chauffeurs. It has been said that little during the past three years that 91 cents out of every dollar paid by licensees for their numbers and for taxes has gone to good roads.

Bulldog's Offspring Said to Be Even Prettier Than Dad

Who has seen the Bulldog's puppy? No, it hasn't been lost, but rumor has it that the Studebaker Bulldog hath an offspring of considerable beauty which will, when fullgrown, look even more handsome than did his daddy at the last automobile show.

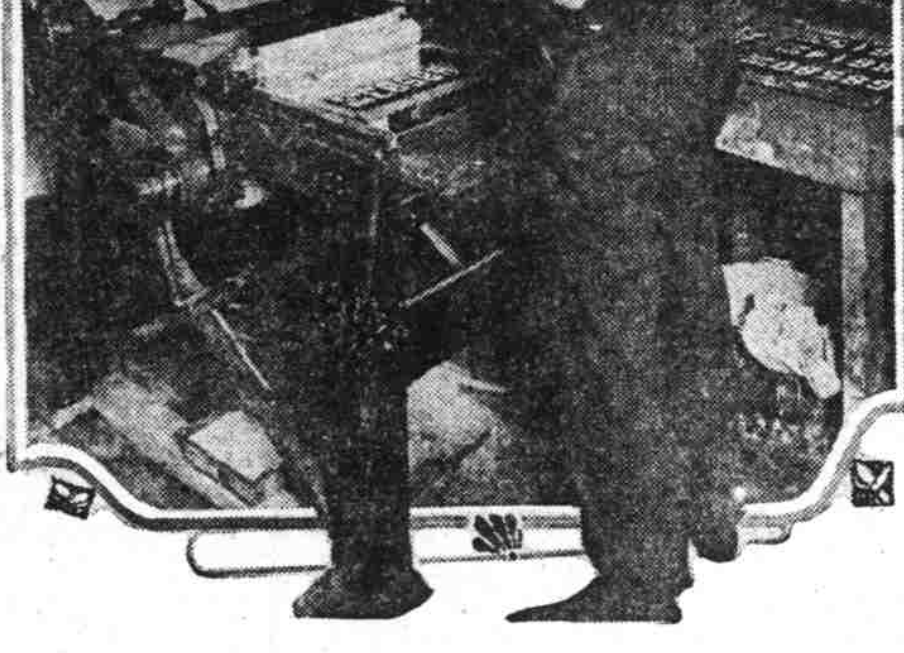
It's said to be a real puppy, a blooded canine, a pooch with all the earmarks of blooded, a yellow with a long line of famous ancestors.

Leoston Smith of the W. C. Garbe company is really and actually excited about it. He dreams of dogs, and nightly a line of bull pups parades across his pillow.

Few know what it is. But it will be out at the show, probably sometime. But it's said to be a mild-mannered hound and not likely to harm anyone. It's a curious animal.

Centralia Tractor Schools Will Be Free to Farmers

Centralia, Dec. 18. — Two tractor schools of three days' duration each, free to every man who is farming a piece of land, regardless of its size, were announced today by L. E. Titus. The first school will be held in Centralia January 6, 7 and 8, and the second in Olympia January 10, 11 and 12. The schools will be free to all farmers, their sons and hired men, and the programs will consist of tractor repairing, the actual work, and lectures by experts.



Here is where Oregon and Washington automotive license plates are being made this year. Scenes in the work rooms of the Irwin-Hodson company show some of the steps through which a license plate has to pass before Sam Koser gets a chance to mail out the tinware. The top view shows the heavy stamps where Oregon plates are impressed. Center insert—The stamping room for Washington plates, and where plates for both states are packed in their neat cartons. Bottom—Lettering Oregon plates on the electric press, which has taken the place of the old hand operation.



Southern Oregon
Roads are in good condition, according to the tourists who pass through Roseburg every day. "We use chains only occasionally," said one of the party who stopped in this city last night. "and if there were no worse places than the roads through Southern Oregon we would have no complaint to make." The sections of road over which slow time is made are short. Beginning at the northern boundary of Douglas county and going south, the slow and muddy spots are a few miles just south of the county line at Comstock. From there to Leona the road is macadam. Between Leona and Drain is fairly good. Drain to Yoncalla, chains should be used as the dirt fills are pretty slippery, but no deep mud is encountered. From Yoncalla to the beginning of the paved pavement, about two miles, the road is pretty rough on account of crushed rock and gravel fills. It is good after the paving is passed until a short distance north of Wilbur; the roads are in fine shape. From Wilbur to Roseburg the roads are considered to be the worst of any place in northern Douglas county, and there are no deep ruts or bad places in this section, but the entire length of the stretch has been rebuilt on new grades, and it is rough and slippery and chains are needed. From Roseburg to Winston it is rough, but solid road. From Winston to Dole is paved, and from there to Myrtle Creek is rough, but good time can be made. From Myrtle Creek to Canyonville via Riddle the road is good. Canyonville to the county line south of Glendale the roads are all in good shape, and good time is made. Smith hill is negotiated by use of chains.

The Pacific highway over the Siskiyou, which was temporarily closed last week a day because of 18 inches of snow having fallen during one night, is open for travel as usual and the state highway department plans to keep it that way all winter through employing a crew with a snow plow to be on duty daily. The state highway department is also aiding automobile travel between here and Portland by keeping Smith hill, 10 miles north of Grants Pass, in as good condition as possible, and when the mud gets too deep by furnishing men and automobiles to pull cars over.

Inland Empire
Walla Walla to Portland, through Ematilla county. Thirty-eight miles paved from Walla Walla to Pendleton; good. Pendleton to Echo on Columbia highway, complete; splendid condition. Echo to Blalock via Umattilla, good. Pendleton to La Grande (old Oregon trail), snow in mountains; very poor, almost impassable. Pendleton to Pilot Rock in construction, rough and muddy. Pendleton to Helix partially complete, some good, some bad. Cold Springs market road, from Cold Springs landing on Columbia to Pendleton, will be started soon; \$185,000 for construction.

Umattilla county roads in better condition than ever before, with 50 miles of new gravel construction complete.

Three feet of snow in the Snoqualmie pass, which has fallen this week, has made the only route directly from here to Seattle impassable and is shutting all auto traffic between here and that city around through Portland over the Columbia river highway. Commercial

travelers in numbers have used that route from Walla Walla to Seattle according to reports by autoists to W. S. Parks of the Tri-State Automobile club of Walla Walla.

Continued fair weather has kept the roads in this section in good condition generally speaking, making the route to Portland via the Columbia river highway such that several women motorists have made the 278-mile trip during the last week alone. The only stretch which gives any trouble along the Columbia river route is from the John Day ferry to The Dalles. Necessity of making use of the old road via the John Day ferry from Arlington takes the motorist over some rough and muddy spots. The new Columbia river highway is recommended after The Dalles is reached.

The detailed report of the Tri-State Automobile club for this section follows: Walla Walla to Spokane via Lewiston; good to 12 miles north of Dayton via Dixie and Waiatsburg. Balance of distance to Pomeroy poor and fair by way of Delaney. Pomeroy to Lewiston, fair. Several miles rough and muddy going over hill to Alpowa canyon. Lewiston to Spokane, good.

Walla Walla to Seattle: Walla Walla to Pasco via Touchet, Wallula and Burbanck, fairly good. Take ferry to Kennewick. Kennewick to Zillah, macadam generally fair. Zillah to Yakima, pavement. Yakima to Ellensburg, rough and sloppy over hill. Ellensburg to Cle Elum, poor to fair. Cle Elum to Seattle, snow during week has made roads over Snoqualmie pass impassable.

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Pendleton to La Grande and Baker City: Not advisable.

All paving work out of Walla Walla completed. While roads generally throughout the inland country are good, they are subject to immediate weather conditions.

Pacific Highway
The Pacific highway is passable all the way from Portland to Olympia with the exception of the newly paved section starting at Tumwater and extending to Chain Hill, near Tenino. The detour running through Plumb station to Tenino is over a country road covered with gravel and in good condition, according to James Davis, assistant state highway commissioner. This newly paved section will be open for traffic by next Sunday, most probably, Davis states, and at the latest early next week. The new stretch of paving between

Toledo and Forest—6.7 miles in length—is now open for traffic," Davis added, "and south of Toledo, the Pacific highway, although not all paved, is in good condition. The western detour, starting near Castlerock and crossing shortly below to the Oregon side of the Columbia, is no longer necessary. There is no reason, after the first of next week, for any interruption on the Pacific highway from Portland through Vancouver near Castlerock and crossing shortly below to the Oregon side of the Columbia, is no longer necessary. There is no reason, after the first of next week, for any interruption on the Pacific highway from Portland through Vancouver near Castlerock and crossing shortly

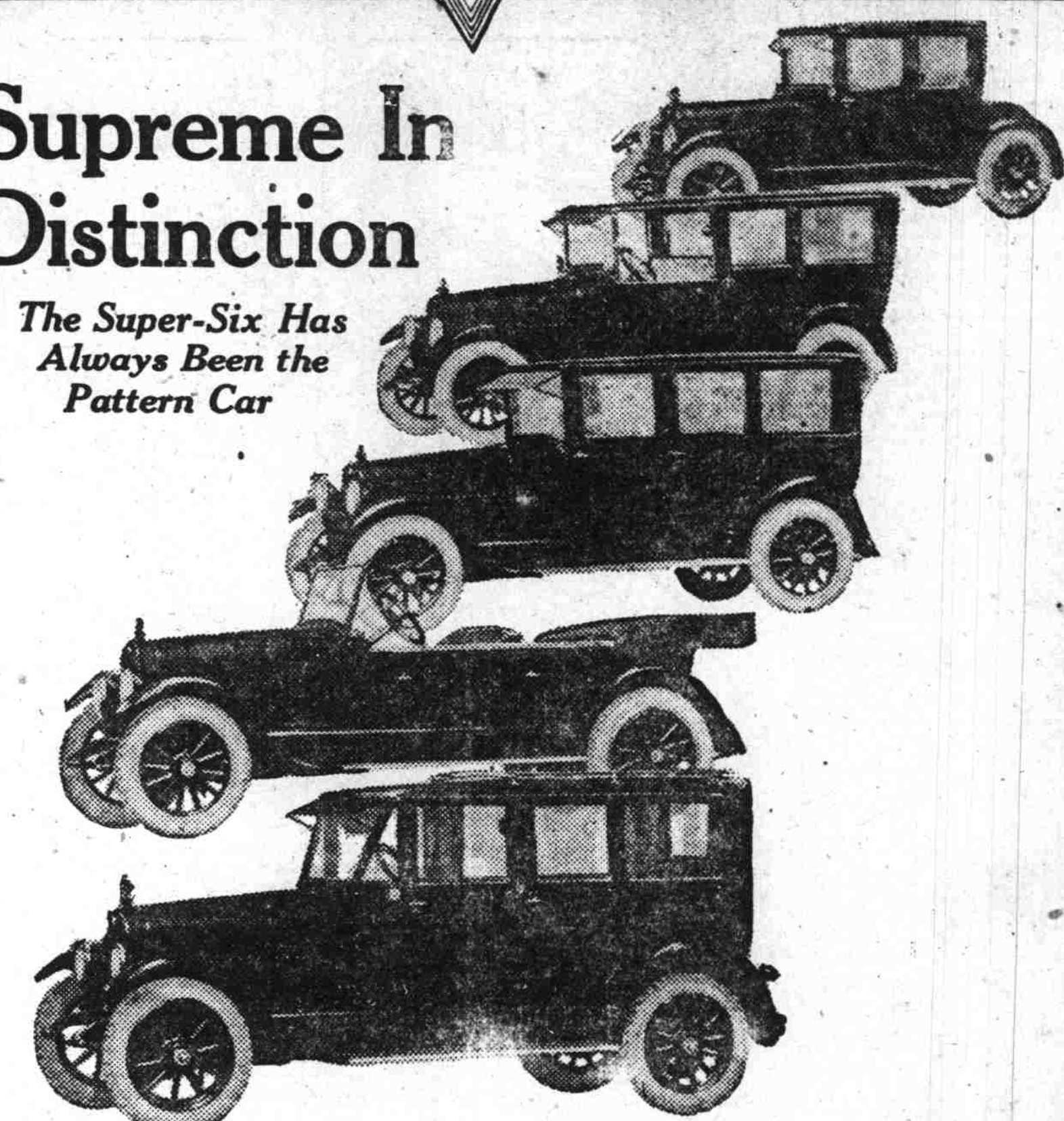
Has Four Fine Bridges
Wenatchee, Wash., Dec. 18.—Chelan county has expended more than \$100,000 on bridges in the last year. It now has four of the finest ever built anywhere as part of a paved road system which will eventually connect all the principal points and resorts in the county.

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