CYCLE CAR TO BE ASSEMBLED HERE

Portland Will Have Factory Devoted to Latest Member of Auto Family.

PRICE IS FIXED AT $395

Number of Prominent Business Men Organize Company to Build Motorette, Which Will Take Name From City.

Not to be behind other cities, even the great automobile-producing centers of the East, such as Detroit and Indianapolis, Portland is to have a factory of its own in the very near future devoted to the assembling of cyclecars. Los Angeles was quick to see the possibilities of the cyclecar and has already a factory started, and Portland will be the second city on the coast and one of the very first in the states to commence manufacture of these light weight motorettes.

Under the title of the Portland Cycle Car company, a number of prominent business men have formed a close corporation with Lewis I. Thompson as president and C. J. McPherson as vice-president to market a car which will sell for $395 f. o. b. Portland.

Mr. Thompson said yesterday that for the past 18 months he has been working on the best European lines to produce a cyclecar without the obvious defects of some of them and with the best points of the majority and that he had now produced a model which has been tried exhaustively and which he was convinced would prove its worth.

Car Specifications Given.

Judging by the specifications the leading features of the car would seem to be twin cylinder, 10 horsepower motor, high clearance, planetary transmission, roomy, streamline body with tandem seating, chain drive from engine sprocket to transmission, thence by V belt to rear wheels. The wheelbase is 96 inches, the tread 40 and the weight 540 pounds. The car will be known as the "Portland" cyclecar. Though a site has not been purchased, the company has an option on a site at St. Johns, where the factory will go up just as soon as possible. The general offices are at 302 Corbett building.

The specifications of this cyclecar are as follows:

Motor—Two-cylinder, two-cycle "V" type cylinders set at 45 degrees. Air cooled. Extra flanges to insure perfect cooling, equipped with aeroplane fan. Mechanically operated valves, magneto, ball-bearing crankshaft, tight-fitting piston rings, aluminum crankcase, oil gauge level, circulating oil system. Special compression release. Extra heavy flywheel. Bore 80 millimeters (3.07 inches), stroke 90.2 millimeters (3.67 inches). Actual brake horsepower at 2500 R. P. M. 14-horsepower. Rating by S. A. E. at 1000 feet per minute, piston speed 9.8. Schebler carbureter with warm-air attachment.

Transmission—Two speeds forward and one reverse, positive type (no slip). Operated by foot pedals.

Belts To Run 10,000 Miles.

Drive—By chain from engine sprocket to transmission, then by "V" belt to rear wheels, which compensates for differential. The rear belts are not so long that the cost is excessive should they need renewing and still of sufficient length to secure elastic action and perfect traction. Belts will run approximately 10,000 miles.

Suspension—The idea of three-point suspension is here worked out and insures perfect flexibility and alignment as well as ease of riding.

Springs—Three full elliptic springs, one in front and two in rear; the driving torque is through rear springs, which keeps belts tightened.

Brakes—A "C" block lined with brake-lining to press rear wheel pulley grooves, giving large surface and great leverage.

Steering—Steering is accomplished by the simplest of principles and one that has gained great favor in Europe. It is by steel cable over drum through sheaves to solid front axles.

Axles—The axles are made out of fine steel and both have a truss rod which can be tightened, insuring lightness with strength. The front axle is of the simple fifth-wheel type, proven satisfactory for cycle cars.

Wheels Are of Wire.

Wheels—Wire wheels with steel rims, rear pulley riveted to same. Plain castiron bearings, four inches long, which can be renewed, are used for all wheels. This insures a freedom from bearing trouble with practically no appreciable loss of power.

Tires—28x2½ inch standard clincher tires in front and rear. Plain tread in front. Chain tread in rear.

Gasoline Tank—In cowl of dash, contains 5½ gallons, enough to run 150 miles.

Tandem Seats for Two.

Fenders—All metal fenders cover wheels from splash and are also fitted with metal fillers.

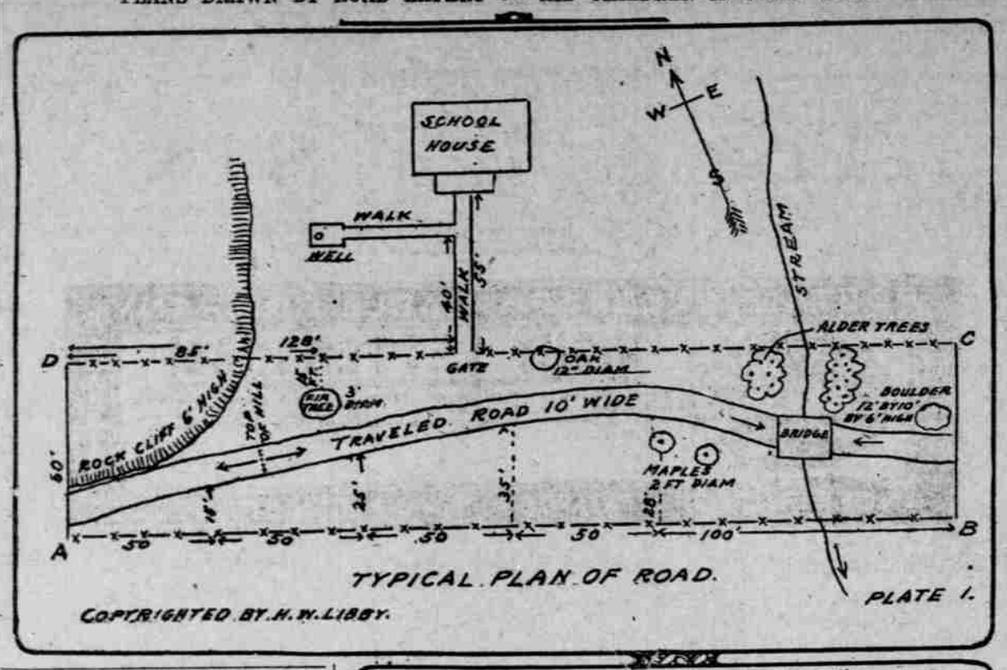
Body—Seats two persons tandem, the rear seat wide enough to carry additional child. The body is constructed entirely on the streamline principle, with beveled sides and back of sheet metal over wood frame.

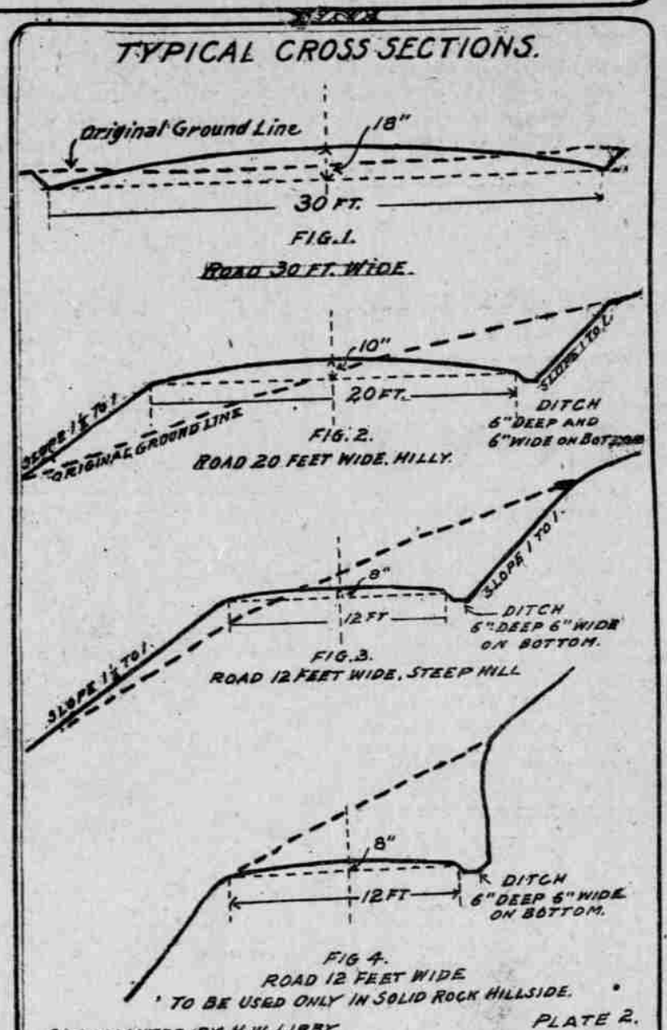
Frame—Of white oak with steel gusset plates and corner braces bolted together; absorbs road shocks and insures lightness and strength.

Upholstery—Upholstery is either of carriage cloth or of imitaton leather; inside of body covered to match.

Lamps—Fitted with two side lights and tail lamp. All metal parts not painted are nickle-plated.

PLANS DRAWN BY ROAD EXPERT TO AID CHILDREN IN ROAD WORK





FACTORY PACE STEADY

JACK RABBIT CAR BRANCH MANAGER TELLS OF OUTPUT.

Apperson Plant Runs Throughout Year, Making Machines at Rate of 10 a Day, Says Curtis.

"There is no reason," says H. W. Curtis, the local branch manager of the Apperson "Jack Rabbit" cars, "why the automobile business cannot be conducted on the same basis as any other legitimate business.

"In years gone by, when the buggy and wagon business was at its height, the dealers said one need not expect to sell sleds and sleighs in Summer, but the manufacturers continued making them right through the Summer so as to be prepared when the demand reached its height in Winter.

"Of course it doesn't take long before a few motorcars run up into a big bunch of money, but, where the manufacturer is financially able, there is a reason, beyond the matter of delivery, why they should build automobiles at a constant, regular rate the year around.

"For instance, every Winter or Summer day adds just ten Apperson cars to market, and, being financially strong, the company need not necessarily sell them at that same daily rate in order to finance the next day's purchases of rough material.

"Any manufacturer who has sufficient capital can go ahead building so many cars every day—all alike—instead of trying to turn out a year's production in four or five months during the Spring rush. It means a uniformity of product and also makes it possible to keep skilled mechanics in the factory the year round instead of being obliged to depend upon the second-raters under the hire and fire three-times-a-year plan.

"Admitting the existence of both dull and rush seasons, the same as in any other business, the Apperson company turns out the capacity of uniform cars every day of the year. The dealers get the advantage of this on account of being able to get good deliveries when cars are selling well, as they are at the present time. This will appeal to the class of buyers who are backward about purchasing a car during the Spring rush, fearing they may get a car that has been skimped."

Motorcyclist Saves Woman.

Frank Emery, of San Francisco, Cal., and his motorcycle, recently saved the life of Mrs. Marion Bennett, of that city. Emery was riding in the vicinity when he learned of the serious condition of Mrs. Bennett, resulting from poisoning. Emery helped the stricken woman onto the front of his motorcycle and rushed with her to the hospital.

NEWEST SIX IS IN TOWN

PACIFIC MOTORS COMPANY RECEIVES LATEST CHANDLER.

Recently Arrived and Popular-Priced Automobile Answers to the Entire Satisfaction of the Agents.

The newest arrival of popular priced six-cylinder cars in Portland is the Chandler Six, the agency for which in this state is held by the Pacific Motors Company, headed by H. S. Colter. The car reached here a week ago and during the past seven days Mr. Colter has had this car out on all possible occasions and he has put it to some of the severest possible tests, all of which it has answered to the complete satisfaction of those who have ridden in it.

There are good reasons a-plenty why the Chandler should be a good performer and the first and far away the most essential reason is that it is the product of men who know: it is built by a company composed of men with years of experience in designing, manufacturing and selling cars and men whose experience has been connected right along with high-priced six-cylinder cars. They are all working at a nominal salary, relying on the dividends to bring them wealth.

The first result of that naturally is that all the heavy cost of investigation and experimentation has been done away with. There is not in its manufacture a single novel, untried or experimental feature.

Cost Declared Not High.

Speaking of the car, Mr. Colter, after returning from a trip over the Heights the other day, said:

"The Chandler lightweight six at $1785 is not only a six you can afford to buy, but it is a six you can afford to run. The statement that six-cylinder cars are costly and necessarily extravagant in upkeep and fuel expense is absolutely misleading and untrue. It is true that many sixes consume gasoline extravagantly, not because they are sixes, but because they are designed by engineers lacking knowledge of proper six-cylinder design.

"The Chandler lightweight six will run 16 miles or more per gallon of gasoline in touring over average country roads. How many fours of the same size and actual power and ability can do this? And this fact repeatedly has been proven by dealers from one end of the country to the other. The remarkable fuel economy of the Chandler lightweight six is one of the facts which I am prepared to prove.

"The efficient oiling system of the Chandler lightweight six is one of its many remarkable features. Chandler cars lose no oil through waste. Every drop of oil is used in lubrication and one gallon is sufficient for from 400 to 700 miles of travel. As there is no oil wasted, Chandler cars never smoke, no matter how much oil is carried in the oiling system.

"Consider a roomy, luxurious six-cylinder car, with power to surmount all hills, strong, sturdy, swift and speedy, weighing less than 3000 pounds fully equipped—honest weight—running 16 miles per gallon of gasoline, hundreds of miles with one gallon of oil and many extra hundreds of miles on one set of tires, and it can be understood why the Chandler lightweight six is not only a six you can afford to buy, but a six you can afford to run.

Minister Rides Motorcycle.

There have been heats of courtships, elopements and honeymoons in which the motorcycle figured largely. And in England even a motorcycle wedding was recently solemnized. But in Hamilton, O., the lovers neither courted, eloped nor spent their honeymoons awheel. The minister was the one who rode the motorcycle. Three couples in different parts of the city were to be married the same evening. The ceremonies were to be performed at practically the same hour. And the Rev. G. W. Phillips had been engaged to officiate in each case. Mounted on his motorcycle, Rev. Phillips visited the three homes and married the three couples, completing all three services within half an hour.

ROAD PRIMER IS OUT

Lane County Surveyor Gives Rules for Highway Work.

BOOK FOR SCHOOL PUPILS

Following Out Idea of Woman to Make Thoroughfare Construction Part of Education, Details of Building Are Explained.

In connection with the plan of Miss Goldie Van Bibber to teach to the children of School District No. 5, of Lane County, the elementary principles of road building, as outlined some weeks ago in The Oregonian, Hollis W. Libby Surveyor of Lane County, has prepared a primer for the children to use.

It will be remembered that Miss Van Bibber's plan, approved by the County Court and commended and commented on all over the Coast, is to have the children use a short strip of road in front of or adjacent to the schoolhouse. In this way they will get practical demonstration of proper methods.

In the first chapter of the primer is a map and a scheme for giving in a report. First of all, this will teach the children simple map-making as it concerns roads; and, secondly, it will inform the County Court as to the nature of the road on which the children are working.

The children will work necessarily with light tools, but it is expected that from their work, with hoes and shovels and carrying surfacing material, perhaps in baskets, they will learn proper methods which will be used in actual road construction by use of graders, drags, wagons and other means of transporting material.

Experts Not Available.

Lane County, by reason of the large number of miles of roads which it is compelled to build and maintain, and by reason of the limited amount of money which can be expended for this purpose, is necessarily required to rely in the building and maintenance of a great part of such roads on men who are not professional road-builders. It is therefore particularly important that the people generally understand how roads should be constructed and how they should be maintained. The work which this primer is intended to assist is a part of the general plan of this county to teach the people of the county as much as possible about roads. In beginning this educational work with the school children, it is felt that particularly good results will be obtained, because what interests the children is sure to interest and inform their parents at the present time, and the knowledge which the children get now will serve them well in the future when they become men and women and have an active part in the road problem.

The instructions contained in the primer are as follows:

(Copyrighted by H. W. Libby.)—Before beginning work on any piece of road it is well to have a plan showing as nearly as one can everything within the road limits, as well as the more important features close to the road, such as buildings, streams and hills.

A report or description also should be written describing those things that are hard to place on a map, such as the condition of the road and the character of the ground.

Scale Is Suggested.

If the section of road to be worked is not more than 300 feet in length, the plan may be drawn on a scale of, say, 20 feet to the inch, which means that for every 20 feet measured on the ground one inch is measured on the plan, and for 10 feet on the ground one-half inch on the plan, and for five feet on the ground, one-fourth inch on the plan. On this scale a section of road 300 feet long and 60 feet wide would be on the plan 15 inches long and three inches wide. The whole sheet for this length of road and scale should be 20 inches long and 10 inches wide.

Measuring Is Advised.

To locate any object in the road so that it can be marked in the plan, measure from the stake at the corner of the road, then measure from the side of the road to the object. It may be easier sometimes to measure down the center of the road and then out to the right or left to the objects to be located. To locate the traveled way, measure along the road to points opposite every bend and then out to the traveled way. This way of locating is shown on Plate 1. Thus, the fir tree shown in Plate 1 is 85 feet from the west end of the road and 15 feet from the side. An arrow, or north point, should be placed on the plan showing what direction is north.

The plan should also have a title telling the name or number of the road and the township, section and school district in which it lies.

The report or description should say:

First. If the road runs over hilly grounds or on the level, or along a side hill, also if it runs through forest or cleared land. If through forest, then it should state the kind of timber and whether thick or scattering.

Character of Ground Essential.

Second. The character of the ground, as sandy, muddy, gravelly or if solid rock.

Third. If through forest, whether the timber has been cut out of the road and the stumps grubbed out or not.

Fourth. The improvement, telling what work has already been done on the roadbed, whether graded, graveled or if culverts have been placed.

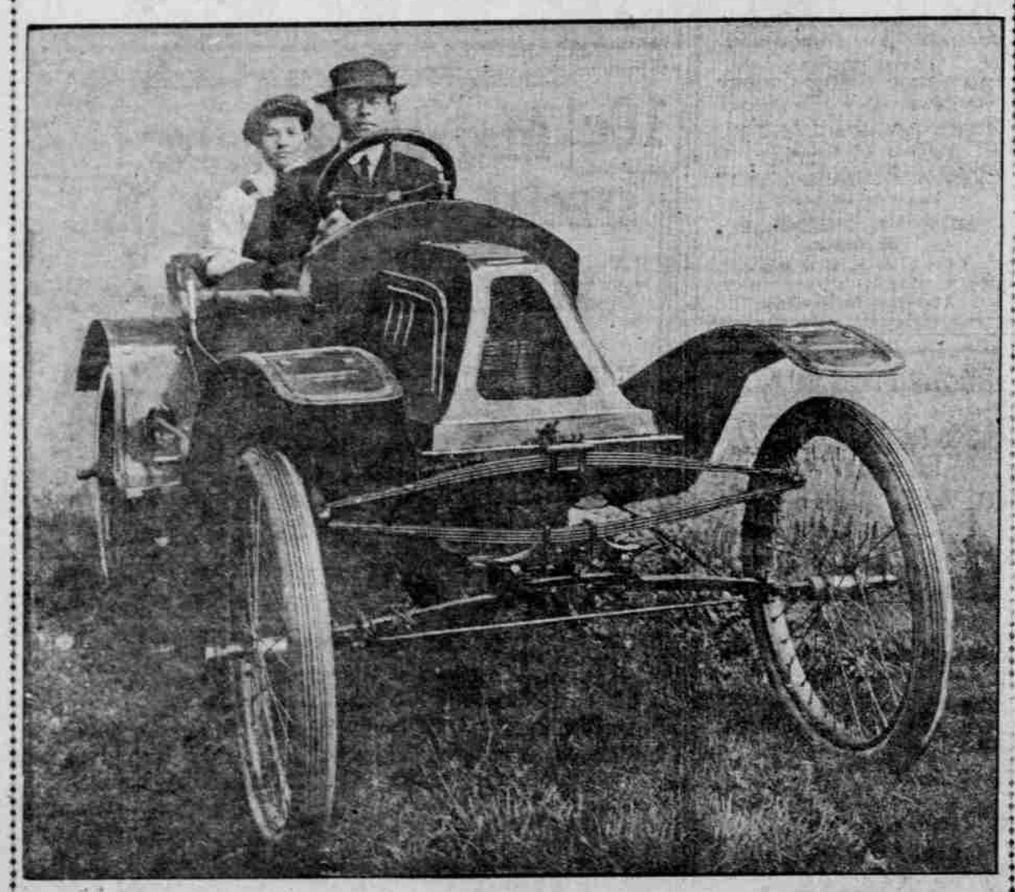
Fifth. The present condition of the road and its condition at other times of the year, whether good in Summer, bad in Winter, whether muddy, full of holes or rocks. In fact, the condition of the surface of the road at all times of the year should be described fully.

Sixth. All that is known about the amount of traffic passing over the road should be stated. It would be well if a count was made for one week of all teams, getting the number of each kind, as two-horse teams, four-horse teams and automobiles or auto trucks.

The plan and description should be as complete as possible and a new one made each year, so that it can be known just how much the condition of the road changes from year to year.

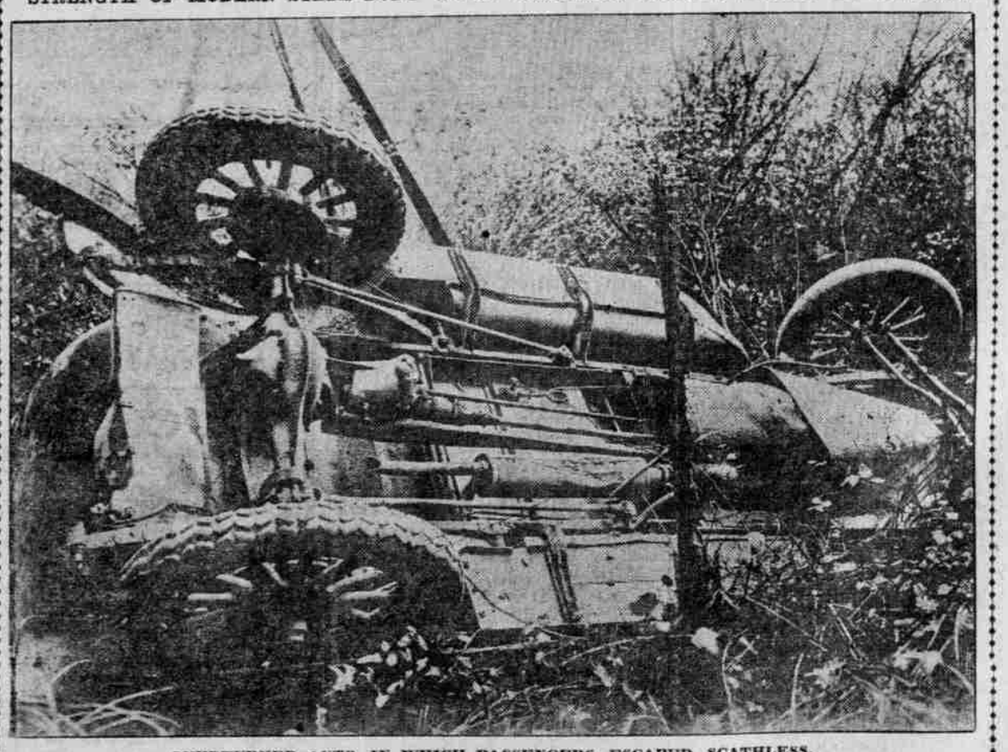
Pins fashioned almost exactly like those of the sort, known today as "safety pins" have been found in Etruscan and Roman tombs, and the date of these has, in some instances, been assigned to a period prior to the Christian era.

AUTOMOBILE THAT WILL BE ASSEMBLED AT FACTORY IN OREGON



THE "PORTLAND" CYCLE CAR.

STRENGTH OF MODERN STEEL BODY WORK PREVENTS SERIOUS INJURY IN ACCIDENT



OVERTURNED AUTO, IN WHICH PASSENGERS ESCAPED SCATHLESS.

The above photograph of what is apparently a bad automobile wreck offers conclusive evidence of the strength of present-day steel automobile bodies. The overturned car shown is a Studebaker "35," belonging to J. W. Gallagher, of Everett, Wash., which has been in operation as an automobile stage between Everett and Granite Falls, Wash.

Recently, when en route with a load of seven passengers, Mr. Gallagher lost control of the car while running at high speed. It left the road, dropped 35 feet into a gulch by the roadside, turning completely over in the fall and landed upside down.

It all happened so quickly that none of the seven passengers could jump, but to a man they obeyed instinctively the natural impulse to "duck" and crouch as low as possible in their seats. The car landed squarely bottom side up. The glass in the windshield was broken to atoms, many radiator tubes were perforated, but the strong steel body held intact, and the seven passengers escaped without a scratch and with nothing as a remembrance of the accident, except the severe shock.

The car was hoisted to the roadway, set to rights, found to be in as good running order as ever before, beyond the broken windshield, radiator and damaged top.

The survivors of the accident, while not recommending similar experience to motorists, are loud in their praise of the strength of chassis and body construction of the modern automobile which can withstand so severe a test without extensive damage or injury.