

MOTOR YEAR BOOK FOR 1920 ISSUED

"Facts and Figures" Put Out
by National Chamber.

FULL STATISTICS GIVEN

Wholesale Sales in Auto Industry
Past Year Over Three and
Half Billion Dollars.

NEW YORK, May 7.—All previous production, sales, export and registration records were passed by the automobile industry in 1920, according to statistics contained in "Facts and Figures," 1921 edition, which was issued by the National Automobile Chamber of Commerce on May 7.

General prosperity and the increasing use of cars and trucks as economic transport units on farm and in industry are believed to be the leading factors in the increased business of the industry during the past year.

The motor car has become an indispensable instrument in our political, social and industrial life," said President Harding in his first message to Congress on April 12. This statement, which appears on the cover of the annual review of the industry, is the keynote of the 1921 edition, supported by many pages of research on the use of the car in many avenues of business. Three million motor vehicles are used by farmers, 100,000 by doctors, 20,000 are used by state governments, 10,000 by municipalities, 12,000 by rural schools, 4,000 by packing houses, several thousand by the postoffice department and thousands more by telephone companies, salesmen, bus lines and other commercial and professional activities.

Sales into the Millions.
The total wholesale business of motor vehicles, parts, tires and accessories in 1920 amounted to \$2,534,814,420. This included car and truck sales of \$2,222,957,078, parts and accessories of over \$725,000,000 and tire replacement business of \$586,756,000. Closed bodies formed 17 per cent of the passenger car production of the current year as compared with their 10 per cent place in the 1919 output. The total number of vehicles sold in 1920 was 2,205,197, of which 222,039 were motor trucks and 1,883,158 were passenger cars, a gain of 12 per cent over 1919 in total motor vehicle output.

Registration Gains 22 Per Cent.
Automobile registration in the United States for 1920 totaled 3,211,295 or 22 per cent more than 1919. Approximately 900,000 of these vehicles were motor trucks. South Dakota now has one automobile for every five persons, Iowa one for every five and a half, and Nebraska one for every 5.9. New York leads the list on the basis of gross registrations, totalling 670,250.

West Virginia showed the greatest percentage growth by adding 61 per cent to her 1919 record. Ohio was the banner state from the standpoint of numerical increase, adding 110,359 cars and trucks. Exports formed a larger part of the automobile business than ever before, having 73 per cent of the total output as compared with 4 per cent the year before. The total number of motor vehicles exported was 174,755, or more than double the 1919 figure of 82,652. United Kingdom, British India, Canada and Cuba were the largest buyers.

Taxes Total \$316,720,000.
The automobile today pays more special taxes than any other industry. Total levies assessed upon the automobile totaled \$316,720,000. Over \$148,000,000 of this is in federal taxes, a sum large enough to cover the federal judiciary, congressional and executive expenses, as well as the costs of the department of interior, commerce, treasury, justice, labor and agriculture, plus the expense of the diplomatic and consular service.

Remarkable gains were made in fuel supply during the current year. Although threatened with a shortage in the spring, production was increased to a point where it reached 4,882,346,699 gallons of gasoline for the year, being an excess of \$26,118,474 gallons supply over the demand.

Outstanding facts of the 1920 wholesale business in motor vehicles, parts, tires and accessories are given as follows:

Value complete car and truck output.....\$2,222,957,078
Value parts and accessories output.....725,196,942
Value tire replacement output.....586,756,000
Motor vehicles produced.....2,205,197
Motor trucks.....188,315
Number trucks.....322,039
Per cent gain over 1919.....71.5
Per cent exported.....7.5
Registration in U. S. A.....3,211,295
Per cent gain over 1919.....22
Number automobiles on farms.....3,000,000
Motor vehicle manufacturing business—
Capital invested.....\$1,304,875,642
Number of employees.....323,000
Wages and salaries.....\$452,950,000
Tires and fuel figures—
Gasoline produced, gal.....4,882,346,699
Gasoline consumed, gal.....4,882,346,699
Tires produced.....32,400,000

ROAD CONFAB INTERESTS

"YOSEMITE TO THE SEA" ASSOCIATION WILL MEET.

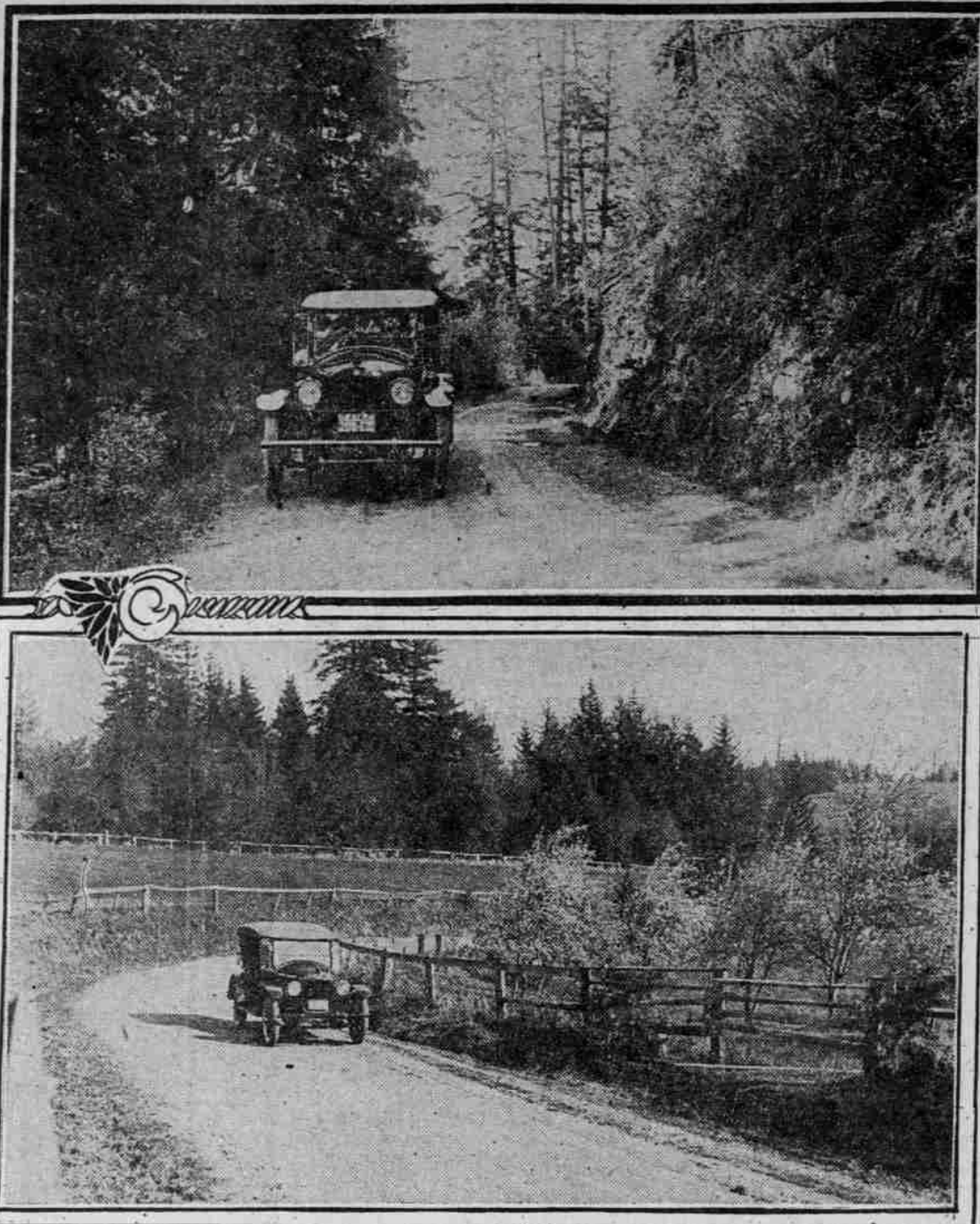
Attempt Will Be Made to Adjust
Differences Between California
Body and County Supervisors.

DEL MONTE, Cal., May 7.—Much interest is being displayed all along coast points in the meeting in Merced of the "Yosemite to the Sea" Good Roads association on May 27. This meeting is to be held for the purpose of adjusting the differences between the California highway commission and the county supervisors relative to bridge construction, etc. The conference is of much importance inasmuch as these differences are what are now delaying the building of the Pacheco pass road. It is expected that the Monterey peninsula as well as the counties all along the coast of this section will be well represented at Merced. The meeting is to be held on a Friday, and it is quite likely that a number of motorists will make it an opportunity of taking a holiday over Decoration day in order to go to the Yosemite via Merced, taking in the meeting on the way.

The directors of the California State Automobile association are going to meet also at that time with a get-together banquet at night. The Pacheco pass road will do much when completed to stimulate travel between points of the San Joaquin valley and the coast.

New Automobile Lock.
A novel automobile lock fastens the gears in reverse position and clamps on the emergency brake.

SKYLINE BOULEVARD OFFERS DELIGHTFUL DRIVE FOR MOTORISTS.



NEW MODEL HUPMOBILE AT TWO ATTRACTIVE SPOTS ON THE SKYLINE ROAD.
For the motorist who likes to get up near the top of the world, where he can look pretty much all over creation, there is no finer drive possible out of Portland than the Skyline boulevard. The road runs along the very tip top of the heights, overlooking North Portland on the one side and the Tualatin valley on the other. Varied scenery is provided, the road at times crossing open stretches, where are located small farms and orchards, and plunging now and then into the woods or carving its way along some hillside. An excellent tour of the Skyline may be made by going westward on the Linnton road to the Liberty road (the old Germanant road), following the Liberty road to the Skyline, turning left into and following the Skyline boulevard to its intersection with the Cornell road, turning left again and entering town over the Cornell road, through Macleay Park and Westover Terrace. E. C. Habel, sales manager of the Manley Auto company, local Hupmobile distributors, made the trip over this route one day last week in one of the 1921 Hups. He reports the road in fair shape, although there is no pavement except on the Linnton road. The Liberty, Skyline and Cornell roads are all macadamized, however, with surface in fair shape. The photos above were snapped by Habel on his trip and show the new Hup at two attractive points on the Skyline boulevard.

TRIPLEX SPRINGS STRONG

NO FLAW IS FOUND AFTER
HEAVY TIMBERS HIT CAR.

Tensile Strength of Willy-Overland
Elasticity Is Proved in Recent Accident.

Evidence of a practical demonstration of the tensile strength of the Willy-Overland triplex springs was received here by Harry Hays, Portland branch manager of the Willy-Overland Pacific company, last week in the report of a peculiar accident

that happened near Redondo, Cal., last week. Pictures of the wreck established the claims beyond all doubt.

It seems that one of the new Overland light "fours" was left parked for the night on the Granna ranch back of Redondo, near Los Angeles, in a well-built shed. Alongside the shed was a framework of 8x8 timbers supporting a 10,000-gallon water tank. Due to faulty foundation or some possible weakness in the timbers the huge framework collapsed during the night, the big tank dropping straight down to the ground, but forcing the heavy timbers down on top of the shed, which was flattened out like a pancake. One of the big beams dropped flat across the hood of the little car, while the rest—and there were lots of them—piled up all over the rest of the body.

When the owner rushed to the rescue of his wrecked Overland, he found

that the body was smashed almost beyond recognition. The wheels had been driven into the ground by the great weight of the falling timbers. The frame was twisted almost beyond recognition by the force of the impact.

Despite the enormous weight heaped atop the little car, despite the force with which the speedily-falling structure had struck the body, despite the great strain to which the framework of the automobile had been subjected, the triplex springs specially constructed to take care of the heaviest sort of shocks, while flattened out and held flat by the great pressure of the 10,000-gallon tank, were intact. There was not a flaw or a crack to be found in them anywhere, proof positive of their dependability to withstand the hardest possible usage on the road.

Hupmobile

You will be well repaid even if you should go out of your way to visit us and see this year's Hupmobile.

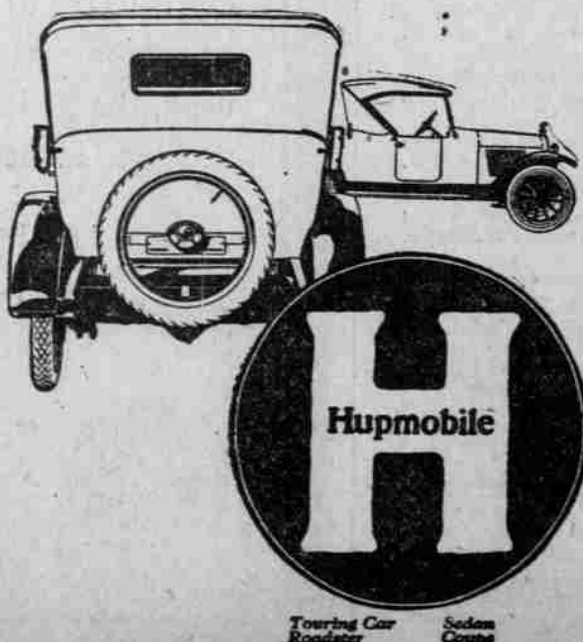
When you see it, you will be instantly impressed by its new and greater beauty.

It has a plate glass window in the back curtain, improved upholstery, and other new details such as moto-meter, windshield cleaner, and outside door handles.

The Hupmobile has always attracted unusual attention by reason of its wonderful goodness. To that is now added surpassing beauty.

Manley Auto Co.

Distributors.
Eleventh and Oak at Burnside.
Phone Broadway 217.



Touring Car
Roadster
Sedan
Coupe

GRADE CROSSINGS DEADLY

TOLL OF AUTO ACCIDENTS
PROVES APPALLING.

More Than 1300 Motorists Killed
by Railway Trains During First
Six Months of 1920.

Just think of the 5696 Americans killed in grade crossing accidents in the calendar years of 1917, 1918 and 1919. Seventy per cent were motorists, exclaims an editorial in Motor Life.

There is no disputing the figures, the editorial continues, for they were compiled by the interstate commerce commission and spread broadcast by the American Automobile association in an effort to arouse car owners to the gravity of the situation, for investigation shows that many of the accidents were brought about by plain carelessness or foolhardiness on the part of the drivers themselves. And, what is worse, this carelessness is increasing apparently, for in the first six months of 1920 there were 1202 motorists killed at grade crossings as against 1232 in all of 1919.

Ghastly figures, are they not? And don't they make you, Mr. Car Owner, stop, look and listen and ask yourself if you yourself are duly cautious when you cross railroad tracks?

Really, it is up to you to do your part in stopping this slaughter by playing safe. Reports show that the great majority of these accidents occur at unprotected crossings over double track railroads, where one train may prevent motorists from observing the approach of another train, or where railroad tracks are obscured by embankments, buildings, trees or shrubbery.

Of course, the only way such accidents can be prevented is to eliminate all grade crossings, but that is an impossibility. Already the Pennsylvania railroad has spent \$65,000,000 in grade crossing elimination—a mere drop in the bucket, for it would cost \$600,000,000 to wipe out the remaining 12,000 crossings on this one railroad alone.

So the onus of the whole affair rests on the shoulders of the motorist. If he will eliminate "chance" from his vocabulary it will solve the problem, for if motorists use common sense at grade crossings this appalling list of fatalities would be reduced to a minimum.

After all, a minute saved by taking a chance at a railroad crossing does not pay interest on the savings.

Motorcycle Records Broken.

Two international motorcycle records for machines of 30-50 cubic inches piston displacement, established by "Gene" Walker at Daytona

beach, Florida, on April 15, 1920, have been broken by H. N. Judd at the Brooklands track in England. His performance, for the new Brooklands world's record at 25.3 seconds, which is the average of trials in opposite directions in accordance with the rules. The mile record not made at 42.1 seconds. Judd's fastest kilometer was made in 24.2 seconds, a speed of 92.44 miles per hour, and his fastest mile in 41.3 seconds, a speed of 87.38 miles per hour. The machine used by Judd was a single cylinder Norton with side valve. American engineers are intensely interested in this performance by a diminutive machine.

PACARD OUTPUT INCREASED

Production Soon Will Be on Basis
of 10,000 Cars Per Year.

Public appreciation of the opportunity to get first-class quality in a smaller and lighter car has resulted in the demand for the new Packard single six that the factory is increasing production as rapidly as possible. It was announced yesterday by John Krog, chief of the Packard company, local distributors for Packard cars, that in a few weeks the single six output will reach a rate of nearly 10,000 cars a year.

"One of the features which the public appreciates most strongly in the Packard is its ease of handling. In the extreme ease with which the car can be handled in traffic and the fact that on congested streets it is possible to park it in a smaller space than can be done with most cars. This is an advantage which is becoming more and more widely appreciated every day and which will increase in value as time goes on and the congestion of the cities becomes greater.

"The great flexibility of the single six engine and the shorter wheelbase make it possible to thread a way through busy streets far more easily and quickly than can be done with a heavy car. The remarkable lightness of the car and the ease in steering and handling the controls contribute greatly to this."

Former Auto Chief Now Rancher.

C. H. Brownell, former advertising manager of the Ford Motor company, whose resignation some time ago caused considerable sensation, has purchased a ranch near Glendale, Cal., and will be a permanent resident instead of but a temporary sojourner. When Brownell left Detroit after leaving Ford he said that it would be but a short time until his return to enter the advertising agency field.

Can't Steal This Auto Robe.

Light chains are woven into a recently patented automobile robe to permit it to be locked in a car and made theft-proof, says Up-to-Minute News of Automotive Progress, compiled by the Southern Motor Manufacturing association, Ltd.

BATTERY IS MADE HERE

ALLEN BROTHERS HAVE MODERN MANUFACTURING PLANT.

Unassembled Storage Batteries and
Parts Made From Oregon
Raw Materials.

Most Portland motorists do not know that Portland is the location of a modern successful storage battery manufacturing plant. Yet such is the case and the concern, known as Allen Brothers, makers of Allen storage batteries, is said to be the only plant in the west which is in a position to furnish unassembled storage batteries as well as the completed jobs.

E. H. Allen and W. C. Allen's start in the battery business began in 1916, handling the Willard storage battery. The shop was located at Broadway and Flanders, where the firm handled the Prestolite storage battery as distributors. The quarters at Sixth and Burnside were also outgrown and a modern shop was erected at Broadway and Flanders, where the firm handled the Prestolite storage battery as distributors.

For several years it has been the desire of the Allen Bros. to produce a battery, but during the world war and immediately following, such a shortage of materials existed that no progress could be made. At the present time an abundance of material is at hand at practically pre-war prices and of a quality beyond criticism.

Much of the raw materials entering into a storage battery are western products and are shipped east by the battery manufacturers and again shipped west as the finished product. Freight rates on this material more than offset additional labor expense of manufacture here and allow a good competitive price on the Allen Bros. storage battery, it is declared.

Port Orford cedar separators are used by many of the large eastern manufacturers, the Port Orford cedar being shipped east from Oregon and returned as finished battery separators after treatment which adds five-eighths more weight to the material. Allen Bros. have the only separator treating plant in Oregon and are not only supplying separators for the manufacture of their own batteries but are manufacturing separators for the repair of all makes of storage batteries. Formerly eastern separators were purchased for the repair department of the Allen Bros. plant as well as most of the battery stations of the west. At the present time this plant is supplying battery repair materials to a great many battery stations throughout the northwest. The way.

plant is equipped to build every type of automobile starting and lighting battery and is furnishing service stations in the northwest with completed storage batteries or complete materials out of which batteries are assembled. Many un-assembled storage batteries are sold to battery service stations in this territory, as the un-assembled battery does not begin to deteriorate until assembled.

AUTO EXPANSION GREAT
Motor Industry Now Second Largest in This Country.

"The automobile industry, together with the producers of affiliated products, like tires and accessories, sold \$2,538,000,000 worth of goods in 1920 and is now the second largest industry in America," says George W. Davis, president of the Davis Motor Car company, in a recent letter to distributors.

"The prosperity of the second industry in America is closely interrelated with that of every other industry, because of the vast amount of money invested, the number of persons productively employed and the great value of the annual production. The fact that the automobile industry has recovered so splendidly from the 'depression' of a few months ago is a gratifying indication of the future prosperity of all business. Then, too, it is an indication of the vital part the automobile plays in every phase of modern life.

"Transportation serves civilization. The interests of all kinds of transportation—rail, water, electric motor and horse-drawn—are identical. Each has a particular sphere of usefulness. The automobile is in a very vital way one of the agents of civilization. The tremendous growth of the automobile industry in the last decade and its present leading position among all the industries is proof of the value of the service of the automobile to mankind. It is the agent of civilization and the creator of prosperity and wealth."

Prime Tank When Gas Runs Out.

Nearly every motorist at some time or other has the peculiar experience of running out of gasoline, says the Buick Bulletin. Whenever the supply tank has been completely exhausted it should be remembered that it is necessary to prime the vacuum tank before the carburetion system will function again. This is generally done by removing the plug on the top of the vacuum tank and filling the tank with gasoline.

The easiest method, however, is, after replenishing the supply of gasoline in the fuel tank, to close the choke on the carburetor, the spark and advance the gasoline throttle lever. Then throw on the switch, and, after waiting for about three minutes, start the motor in the usual way.

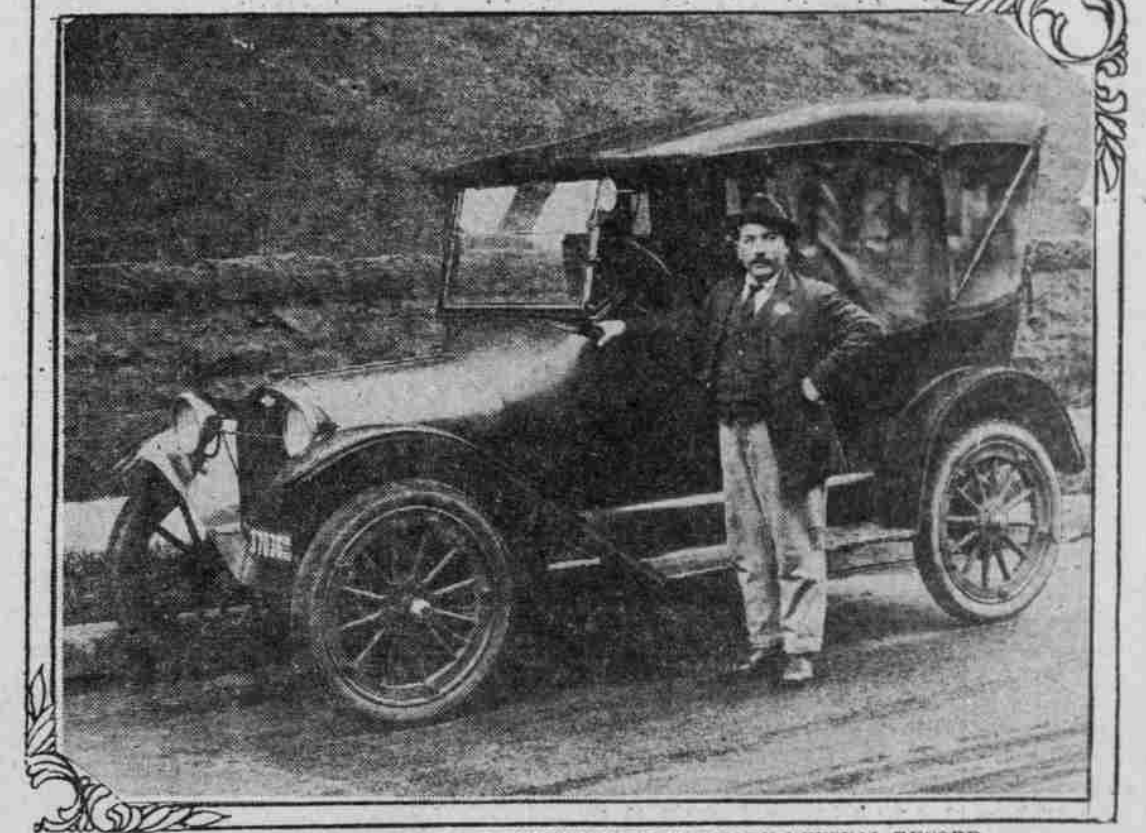
Portland Man Travels

7 Times Around the WORLD

—in distance
if not in fact

THE SUNDAY OREGONIAN.

—THAT'S THE DISTANCE THIS CHEVROLET HAS TRAVELED ON LESS THAN \$75 REPAIR BILLS.



NICK CORNACCHIA AND HIS "JITNEY," WHICH HAS MADE UNUSUAL RECORD.

On May 5, 1918, Nick Cornacchia, a "jitney" operator of this city, put down enough round dollars on the owner of the Fields Motor Car company to take away a little Chevrolet. Last week he brought the car back and traded it in for a new one. His speedometer showed that he had run the car 179,500 miles in less than three years, and his entire record, which he kept faithfully from day to day, is one of the most unusual ever known in this section. Here it is:

Car purchased May 5, 1918, and operated from that time until April 20, 1921, as a "jitney" between Portland and Linnton; total mileage, 179,500; average daily mileage, 165; average passenger load, six people; average tire mileage secured, 10,000 miles per tire; average gasoline consumption, 22 miles per gallon; average oil consumption, 300 miles per quart; total repair bill, less than \$75, including \$44.73 for a new storage battery.

This Remarkable Record Won't Surprise Chevrolet Owners

They know the Chevrolet—its sturdy construction and utter dependability. Many of them probably have done as well with their own cars. Is it any wonder that Chevrolet owners are Chevrolet enthusiasts?

This particular car is still in fine condition. The owner traded it in at a good price on a new Chevrolet. He, like thousands of others, wouldn't have anything else.

Learn about the Chevrolet "490" CASH REFUND OFFER which enables you to save \$70 to \$100 on a new machine if bought before July 31, 1921. ASK US—WE'LL BE GLAD TO EXPLAIN

FIELDS MOTOR CAR CO.

Chevrolet Distributors at
Fourteenth and Alder Streets St. Johns P. H. Dunn Motor Car Co.,
Grand Avenue and East Burnside Street Gresham Milwaukie Street and Bybee Avenue