

PETROLEUM SUPPLY FIELD PLentiful

Oil Operators Say Output Is Not Decreasing.

PRODUCTION ON INCREASE

Deposits Are Widely Distributed and New Discoveries Promise to Keep Industry Even.

WASHINGTON, Dec. 18.—Pessimistic predictions about an impending petroleum famine* at some time in the more or less vague future are not taken seriously by practical oil producers. This was evidenced in addresses at the recent annual meeting of the American Petroleum Institute held at Washington. Their views were in direct variance with those of George Otis Smith, director of the United States geological survey, and the experts of the bureau of mines, who have prepared impressive statistics showing that at the present rate the world is likely to reach the vanishing point while the present generation still is looking for gasoline to run automobiles.

The men who have been in the oil industry for years simply refuse to get excited about the possibility of exhausted supplies. They have heard the same cry before, their contention is that if prices are high enough, as they are now, they will spur production and that the definite figures as to the supply still obtainable and setting a time for exhaustion within the lifetime of men now engaged in the petroleum business are distorted throughout the world and I believe in sufficient quantities to meet the requirements, present and future. If the economic law of supply and demand is given free opportunity to assert itself and artificial political and governmental restrictions are removed, allowing everybody from everywhere to participate in the prospecting and production necessary, there will be plenty of oil to meet the requirements in all parts of the world for many generations to come.

These views were shared by R. D. Benson, president of the Tidewater company, and other speakers who addressed the convention.

Director Smith took a more pessimistic view of the situation. He declared that increased production and production was absolutely essential and that oil supplies should be conserved for the more essential purposes. He said that motor vehicles and factors should be given first place in line at the filling stations, to the exclusion of "pleasure" automobiles. He said that it might become so serious that government action would be necessary to save crude petroleum for the production of lubricants instead of gasoline.

Open Door Is Wanted.

It was evident from the addresses of most of the speakers that the incoming administration at Washington would be asked to insist upon an open door policy in the parts of the world in the exploration of oil fields as that American citizens would have equal rights with those of other nations in their development. Parceling out of oil fields among Great Britain, France and Italy was condemned in unmeasured terms and it was contended that if this policy was persisted in the United States should retaliate by conserving all its oil resources for the use of its own citizens. It was noted that this suggestion evoked prolonged applause.

Comparative analysis of production and consumption of gasoline for the first nine months of 1918, 1919 and 1920 as compiled by the bureau of mines shows evidence of improvement in the gasoline situation. Despite the heavy increases in domestic consumption and the export trade, the stocks on hand September 30, 1920, were considerable larger than in the corresponding period in 1919, but less than last year. The refiners produced a daily average of 15,129,370 gallons of gasoline during September this year against 11,319,419 gallons during the same period in 1919.

Domestic Consumption Increases.

The refiners reported 288,195,394 gallons of gasoline on hand September 30 as against 269,772,728 in 1919 and 271,135,419 in September, 1918. During the first nine months ended September 30, 1920, domestic consumption of gasoline amounted to 3,211,275,993 gallons, a noteworthy increase over the corresponding period last year when domestic consumption aggregated 2,574,541,261. These figures reflect, of course, the increased use of internal combustion engines. Exports showed a high percentage of increase as 465,439,992 gallons were shipped abroad since January as compared with 258,184,644 gallons for the nine months in 1919. The foreign trade for this year exceeded 1918, regarded as the banner year for exports of petroleum products. Shipments to insular possessions for the first nine months this year amounted to 16,312,282 gallons and 12,839,959 gallons of gasoline in the same period last year.

Consumption of lubricating oils since January amounted to 477,840,636 gallons as against 359,628,571 gallons last year. The total stocks of lubricating oil on hand September 30 was 120,448,829 gallons. This figure represents a sharp reduction in reserves for in September, 1919, there were 153,967,070 gallons of lubricating oil in stocks. The fact that there has been but little increase in the daily average production for three years easily accounts for this slump.

CITY EXTENDS WELCOME

Minneapolis Committee Working to Aid Auto Visitors.

Not many years ago and, let us whisper it, even today in some benighted localities, it was the plainest custom to consider any visiting

motorist fair game. The first traffic cop who spied a license plate from another state marked the driver of the car bearing it as his own and promptly handed him a summons, no matter how exemplary his conduct might chance to be. It is pleasant to note that this old idea is passing. One city, at any rate, has pushed the pendulum over to the other side so far as to arrange a positive welcome for strangers in motor cars within its gates. This is Minneapolis which has established a welcome committee. Whenever a Minneapolis policeman sees a strange license plate, he stops the owner and hands him—a summons, but from the welcome committee, where he will receive a courteous welcome and any information that will help make pleasant his stay in the city—December Motor Magazine.

Joining Chain Ends.

The easiest way to join the ends of a driving chain is to jack up the rear wheel and then engage the links of one end of the chain with the teeth of the countershaft sprocket. If the rear wheel is then turned until it is possible to engage the first link of the other end of the chain with that tooth of the sprocket which brings the links to be joined together and if the wheel is then turned back far enough so that both ends of the chain are held on the sprockets, it will be

SECOND DURYEA CAR IN FEDERAL MUSEUM

Gasoline Automobile Built About 28 Years Ago.

RELIC INTERESTING ONE

Machine Simply Converted Horse-Drawn Carriage, With Mechanism Comparatively Simple.

WASHINGTON, Dec. 18.—The national museum has just received and placed on exhibition in the arts and industries building the second gasoline automobile designed and constructed by Charles E. Duryea. He

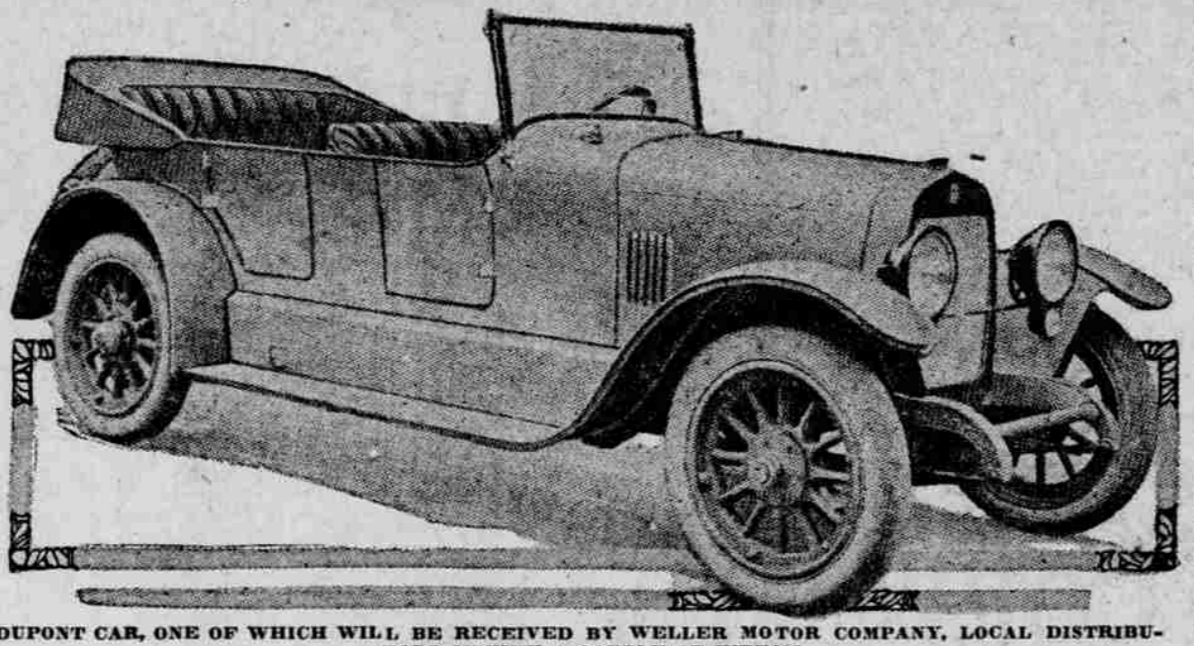
crank shaft by engaging a pair of bevel gears on the upper face of the flywheel.

Slide Gears Used.
Attached to the center of the under face of the flywheel is a bevel gear which engages two gears on a horizontal shaft. Through small friction clutches this horizontal motion is transferred through wide gears to a jack shaft, at the ends of which are small sprocket wheels, which are connected by bicycle chains to large sprocket wheels secured to the inside of the spokes of the rear wheels of the carriage.

In addition, on this jack shaft there is a small differential enclosed in a housing, being almost a miniature of the modern differential. There are two clutches attached to the main driving shaft, one for forward motion, and one for reverse. They are controlled by an up and down motion of the steering tiller, through wires over pulleys controlling a sliding cam, which engages and disengages the clutches.

One Feature Preserved.
The steering mechanism is of the tiller type, the left and right motion being transferred through a radius rod to "C"-type steering knuckles. The pivot line of these knuckles intercepts the plane of the wheels at the ground, a feature which is still found in the designs of modern automobiles. The whole power plant is supported on a chassis, the rear end

NEW QUALITY FOUR WHICH WILL BE ON DISPLAY AT AUTO SHOW.



DUPONT CAR, ONE OF WHICH WILL BE RECEIVED BY WELLER MOTOR COMPANY, LOCAL DISTRIBUTORS, WITHIN A COUPLE OF WEEKS.

an easy matter, especially if a small center punch is used, to line up the hole and insert the connecting pin or bolt.

DUPONT HERE FOR SHOW

NEW QUALITY FOUR TO REACH HERE IN TIME.

Weller Motor Company, Portland Dealers, Get Assurance From Factory.

The DuPont four, a quality car put out by the DuPont interests at a factory at Wilmington, Del., will make its initial bow in Portland at the time of the 15th annual auto show at the auditorium, beginning January 10, according to the announcement made last week by the Weller Motor company, which has the agency for this car throughout the Portland territory.

Although the Weller company has for some time been designated distributor, it has been unable to secure any of the new cars heretofore and only received assurance last week that one would be sent here in time for display at the auto show. Arrangements for securing a car in time were made by H. H. Bromberg, sales manager of the company, in a flying trip to Seattle last week. Bromberg heard that officials of the company were to be in Seattle to confer with the distributor there and intercepted the officers that at least one of the new automobiles would be here in time.

The new DuPont will be, so far as is known at the present time, the only make of car to be shown at the auto show in January, which has never heretofore been displayed in this city. Of course many of the other dealers will have the newest models of their cars from the factory for the event, but the DuPont will be brand new in every respect and it is believed that not even a stray car of the kind has ever appeared in Portland thus far.

Particular interest attaches to the new car at this time because of its recent purchase of General Motors stock by the DuPont and Morgan interests. The DuPonts have been for some years manufacturers of auto accessories of various kinds, including fabric for auto tops, but only recently entered the automobile field itself, with the acquisition of the factory at Wilmington and the production of the DuPont car. With the purchase of controlling interest in General Motors the DuPonts, together with the Morgan interests, become, of course, the biggest factor in the automobile industry in the United States.

The new DuPont lines up as a high-quality four-cylinder car and the price is in the neighborhood of \$3500 factory. The car in general body lines is said to lean towards European design, being low slung and "lean" in design. The motor is L-head type, with cylinders cast en bloc and is designed to meet the demand which is so noticeable throughout the country at the present time for speed, strength and flexibility, with economy of operation.

American left-hand drive cars are considered unsafe in Great Britain in a decision made by the English ministry of transport.

Start Your Christmas List With a Bicycle for Your Boy and Girl

You could never find a present that would delight your youngsters more. A bicycle is the happy realization of childhood's desire.



Large stock to choose from, all sizes and styles. Come in and pick out the one you want.

BALLOU & WRIGHT
Broadway at Oak Street

tween September, 1892, and September, 1893.

The acquisition of this most interesting object was made possible through the generosity of Ingilis M. Uppercu, president of the Detroit Cadillac Motor Car company of New York city. Although the machine on exhibition is not the first car made by Duryea (the first being designed and built between August, 1891, and September, 1892, and successfully operated), it is a duplicate except in having a more powerful motor and correspondingly heavier and stronger parts.

Just as in the very beginning of railroad transportation, the passenger coaches used were simply stage coaches mounted on wheeled trucks, so Duryea's first and second automobiles were simply converted horse-drawn carriages, the particular style chosen being the lady's low phaeton. Every part of the carriage was used, simply modified in shape, propelling and control mechanism.

Mechanism is Simple.

The motive power of the vehicle is a single cylinder, four cycle, water cooled gasoline engine, designed by Duryea. The engine, whose piston rod and crank shaft are both exposed, lies horizontal with its head toward the rear of the carriage. The crank shaft and flywheel are located at the center of the vehicle below the seat. The engine is fired by a make-and-break spark, a pin attached to the center of the piston head striking a pivoted arm, which in turn is in contact with an insulated connection through the cylinder head to the source of the electric current (dry batteries). The carburetor is of the spray type without a float. Fuel was fed into the float chamber at a rate which would give maximum power at the desired speed, the motor being operated at a constant speed, as it was thought at that time that a gasoline engine could not be throttled.

There is an overflow line in the so-called carburetor, so that if the speed of the engine slowed down, the excess gasoline would flow out into the tank below from which it could be returned to the supply tank by means of a hand pump. The starting crank projected at the rear parallel to the engine cylinder and turned the

of which is held by two rods attached to the extremities of the rear axle, forming a sort of pivot and resulting really in a three-point suspension.

This machine was used about Springfield during the winter of 1892 and spring of 1894, and, in the meantime, another machine was being built—this one to be a real automobile. This third machine was running late in 1894 and won the first American automobile race, Thanksgiving day, 1895, at Chicago.

EUGENE IMPROVES PARK

AUTO CAMPING GROUNDS ARE MADE LARGER.

City Purchases Property to Be Added to Public Recreation Spot and Beach.

EUGENE, Or., Dec. 18.—(Special.)—The Eugene city park commission has purchased additional property adjoining the butte park in the northern part of the city, one tract lying on the south slope of the butte, at the main entrance for pedestrians, and the other at the northwest corner of the park, on the river bank, for the purpose of enlarging the automobile tourist camping grounds. The tract at the entrance of the park has been owned for many years by Robert McMurphy and has been used by the public ever since people began to ascend the butte, but now that the city owns the strip of land the park commission will construct a permanent walk and steps from the Southern Pacific grounds to the road, half way up the hill.

The other tract purchased by the commission adjoins the property of the Eugene Lumber company. This will be cleared and improved and the camping facilities that mark the remainder of that portion of the park that adjoins the river will be extended to it. Included in the com-

mission's plans for the improvement of the camping grounds next spring is the building of a roadway extending through the tract parallel with the river and about 50 feet from its banks, providing camping sites on either side.

The rest cottage or bungalow on the camping grounds has been completed and will be opened to the public in the spring. Not only is the building intended for use of tourists and provided with modern conveniences for them, but there are dressing rooms for bathers. The river at this point has been a popular bathing place for the people of Eugene for the past several years and the erection of the bungalow, it is predicted, will make it more popular than ever.

OHIO TO HAVE ROAD PHONES

Universal Plan Evolved to Aid Auto Drivers When in Trouble.

Nearly all the great inventions—barring the mysterious ones of Edison—simplify the problems of life by means so simple that everyone wonders why he did not hit upon the device. For example, a great fortune was made by the invention of a machine which makes wood screws with points upon them. Nowadays anyone who sees an old-fashioned wood

crew, as large as one end as at the other, for which a hole had to be bored with a bit, wonders why the first man who thought of a wood screw did not think of threading it to a point.

According to an Ohio automobile publication, telephones are to be installed upon the public roads in Ohio for the convenience of travelers. The plan is to put up small booths at each milepost. The motorist who is stranded always will find himself within half a mile of a telephone. The plan provides so simply for the solution of one of the vexing problems of road travel that it seems it should have been prepared a dozen years ago. The road telephone would be an in-

stitution so obviously necessary that it would rate with the screw point as something which should have been instituted before it was.

The custom of the last decade of the nineteenth century to hunt up the nearest farmer who would, for time and a half or more, provide a pair of mules to tow a stranded automobile, is obsolete in the twentieth century. There is always towing service as well as tire service within half a mile of a telephone can be had.

The Massachusetts highway commission, with an international reputation as a leader in matters pertaining to the construction of roads and their maintenance, was formed in 1902.

Christmas Morning—A Ford Sedan

The sound of an automobile horn at the curb in front of your home Christmas morning! The whole family rushes to the window! There stands a shining new Ford Sedan—with all the beauty of an electric and all the power, dependability and economy of the wonderful Ford chassis and engine.

No other gifts in any quantity can bring such happiness to the whole family on Christmas day and every day through the coming years as this one gift for all, and for yourself—a Ford Sedan.

You will drive it all winter everywhere. It broadens your horizon, takes you out of the city, brings all the beauties of Oregon scenery close to your home, eliminates distance from friends, brings the glow of health to pale cheeks and of happiness and relaxation to tired eyes.

Everyone can afford to own a Ford Sedan. The price is fixed by the factory—the same everywhere, except for freight. And that price is now lower than ever before. It has been cut below actual cost of production. Your usual Christmas gift money may make the first payment. The balance can be paid in monthly installments.

Chassis	\$360.00	Touring (With Starter) . . .	\$510.00
Runabout (Regular)	\$395.00	Coupe (With Starter)	\$745.00
Runabout (With Starter)	\$465.00	Sedan (With Starter)	\$795.00
Touring (Regular)	\$440.00	Truck (Pneumatic Tires) . . .	\$545.00

The Prices Listed Above Are F. O. B. Detroit.

For Sale by the Following Authorized Ford Dealers

Francis Motor Car Co. Grand Avenue at Hawthorne	Wm. L. Hughson Co. Broadway at Davis	Talbot & Casey, Inc. East Ankeny at Grand
Palace Garage Co. 12th Street at Stark	Rushlight & Penney East Third at Broadway	Robinson-Smith Co. Sixth at Madison

"Have Your Ford Sedan Delivered Christmas Morning"

PORTLAND'S GREATEST TIRE SALE

We must turn all our tires into money, regardless of make or size

STOCK WILL NOT LAST LONG AT THESE LOW PRICES

30x3	LIST \$19.10.	\$7.67
	SALE PRICE . .	
30x3 1/2	LIST \$23.20.	\$9.44
	SALE PRICE . .	
32x3 1/2	LIST \$28.05.	\$11.27
	SALE PRICE . .	
31x4	LIST \$32.50.	\$12.98
	SALE PRICE . .	
32x4	LIST \$36.80.	\$14.95
	SALE PRICE . .	
33x4	LIST \$38.60.	\$15.90
	SALE PRICE . .	
34x4	LIST \$39.60.	\$16.40
	SALE PRICE . .	
35x4 1/2	LIST \$55.45.	\$22.30
	SALE PRICE . .	

Out-of-town orders during this big sale must come with deposit

Eagle Tire Company
122 NORTH BROADWAY PORTLAND, OREGON
Phone Broadway 1612 Opposite New Post Office

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Behind every Vesta Service Station is the policy of the Vesta Accumulator Company; complete equipment, expert service and guaranteed repairs.

Our ability to install complete equipment, our skill in battery repair work and our willingness to use both our equipment and experience for the best interests of motorists place at your disposal the highest type of battery service.

We do everything in our power to help you get maximum service from your present battery—no matter what make it is. All Vesta repairs are guaranteed for six months.

We are able to do this because in repairing any battery, we use the patented features which have made Vesta batteries famous. We do not charge for testing your battery. Drive in and let us look it over. You will like Vesta Service and the plan behind it.

Gibson Electric Garage and Storage Battery Co.
Alder at Twelfth

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COSTS LESS PER MONTH OF SERVICE