

## FRANKLIN RECORD OF PRODUCTION IS HIGH

Closed Cars Leap From 189 to 6000 in Five Years.

### FIRST MACHINE IN 1907

Sedan Built on Ability in Open Road Driving—Many Advantages Are Claimed.

From a production of only 189 enclosed cars in 1914 in addition to open types to nearly 6000 enclosed cars in 1919, is the exceptional manufacturing and sales record of the Franklin Automobile company of Syracuse, N. Y.

carrying capacity of the spring is reduced materially. In the event that your springs were weak before, the elastic limit of the steel would be exceeded at the first hard bump and breakages would result, especially if your springs are old and apt to be crystallized.

"Then as springs do not wear out and lubrication is not recommended unless springs are more than strong enough, what other attention of importance could be given to springs?" As stated springs require little attention, and as a rule get none. I am convinced beyond a doubt, however, that there are more springs broken due to loose spring clips than any other cause.

"The bearing surface which is the center of the spring is not substantially held to axle seat due to loose clips, permitting the several leaves to shift, and especially putting the most strain on the stiffest leaves or plates. As a result one or more of the leaves carrying most of the load usually break, and unless these broken leaves are detected by the driver at once, and replaced with new ones, the spring is weakened to such an extent that the first bump will break the balance. A stitch in time saves nine," well applies to springs and a broken leaf replaced in time will usually save nine others, as the average spring has about ten leaves.

"It must be kept in mind that springs are designed originally for

## SPACE FOR AUTOS GROWING PROBLEM

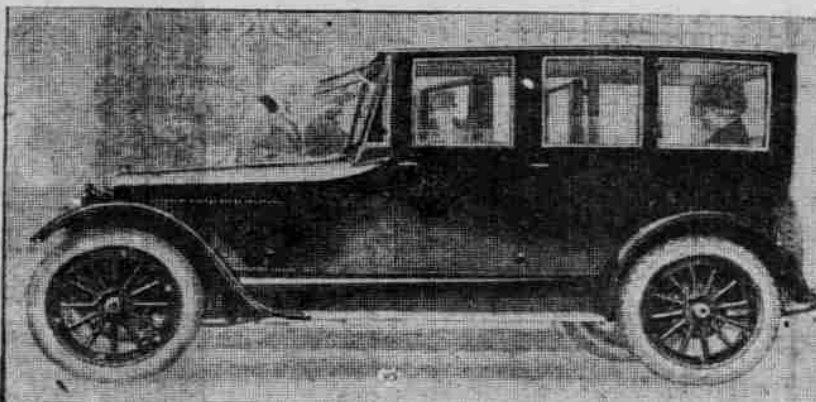
Cities' Landscape Architects Confronted by Congestion.

### SAFE ISSUE IS PUT FIRST

Arrangements to Provide for Overflow Shown in Most American Centers.

More adequate facilities for the automobile, particularly with regard to specially selected parking areas or public garages, form one of the interesting problems with which the city official or landscape architect is

## Liberty Superiority Distinctly Noted in the New



## LIBERTY SIX

Not only in appearance, which denotes individuality and artistic perfection of design, but in the way this superb sedan rides and drives is Liberty "Difference" unmistakably evident.

The silent, velvety gear shift, the absence of body rumbles, the smoothness and power of the softly purring motor—all indicate ultimate perfection of design, accurate balance of mechanism and accurate workmanship.

For the utmost in automobile comfort and satisfaction, drive the

## LIBERTY SIX

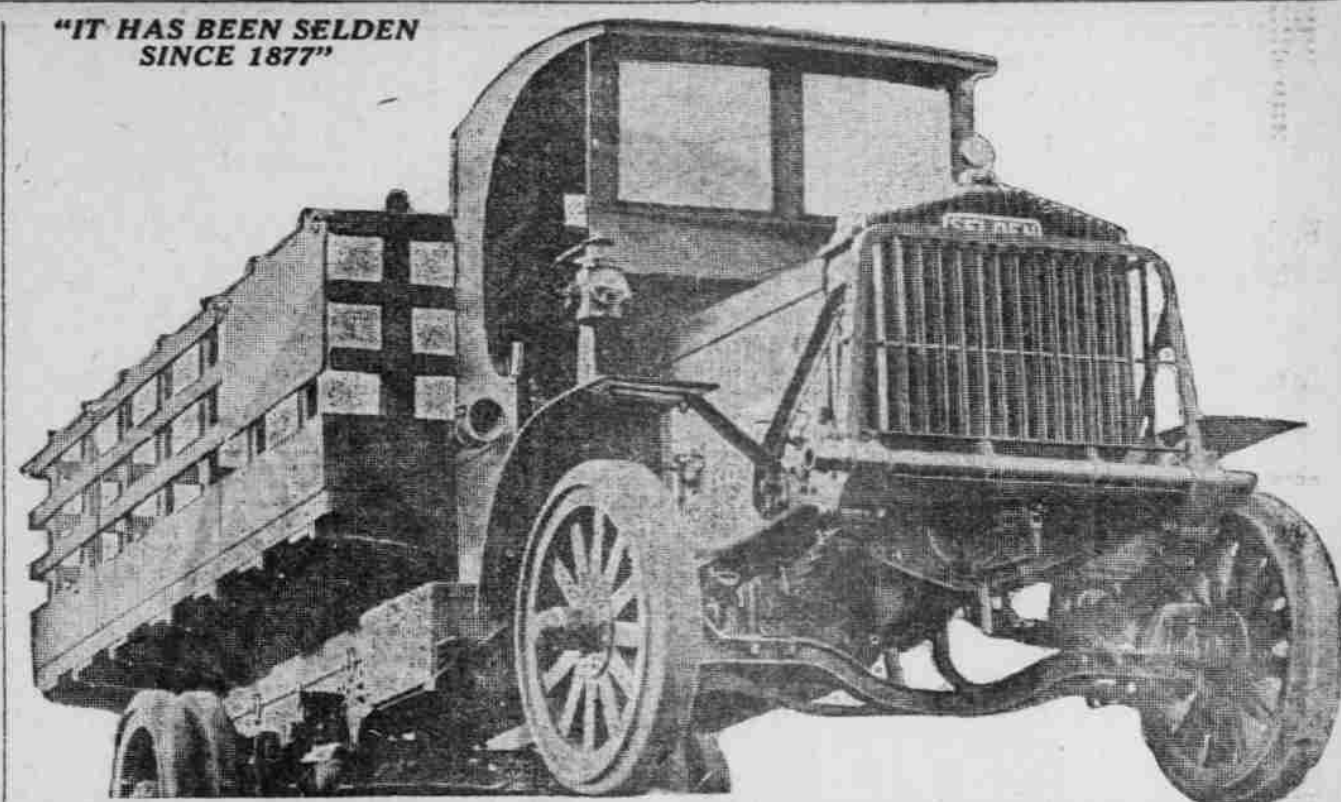
IMMEDIATE DELIVERY IF YOU DO NOT DELAY

## W. H. Wallingford Co.

Oregon and Southern Washington Distributors for the Liberty "Six" and Briscoe "Four."

16th and Alder Phone Broadway 2492

## "IT HAS BEEN SELDEN SINCE 1877"



## NOW COMES THE SELDEN

Back from the Marne and the Somme, after three and a half years of faithful performance in the greatest tragedy of mankind, comes the SELDEN; thirteen thousand of these wonderful trucks did their bit for Uncle Sam.

Engineering principles, backed up by American genius of the highest order, has produced the SELDEN and earned for SELDEN TRUCKS the enviable record for performance which they hold the world over.

Increased manufacturing facilities prompted the manufacturers of SELDEN Trucks to annex additional fields for the sale of their products; therefore, we NOW offer for the consideration of truck operators in Portland and Oregon territory the powerful line of "In-Built-Quality" SELDEN WORM DRIVE TRUCKS of 1½, 2½, 3½ and 5-ton capacity. The first carload to arrive here about January 15th.

### CONDENSED SPECIFICATIONS

MOTOR—Continental, waterproof high-tension magneto, clutch—Selden-Brown-John, dry plate, multiple plate disc, completely enclosed. TRANSMISSION—Selden-Brown-Lipe, selective, sliding gear type, mounted amidships. Nickel steel gears and chrome-nickel shafts, mounted on Timken bearings. REAL AXLE—Timken, full floating, worm gear mounted in single place; scientifically constructed one-piece steel housing. FRONT AXLE—Timken drop-forged "I" beam. Tie rod behind axle. Timken bearings throughout. SPRINGS—Perfection. FRAME—Pressed steel. STEERING GEAR—Gummer, semi-reversible, heavy worm and sector type, 20-inch steering wheel. All wearing surfaces of Selden trucks are bronze-bushed, impregnated with graphite for lubrication, a big factor in low upkeep cost. EQUIPMENT—Motor-Meter, Hub-Odometer, lamps, warning signal, tools, standard finish.

Some Good Territory in Oregon Available for Responsible Dealers. Write for Information

## BUTLER MOTOR CAR CO.

MAIN OFFICE: 310 RAILWAY EXCHANGE BLDG. PORTLAND, OREGON Howard Butler, Mgr.

Main 578



Mrs. J. Arthur Norman, 582 East Nineteenth street North, came downtown Christmas morning to find this handsome Templar four-passenger Sportster parked at the front door. In the picture Mrs. Norman is at the wheel of her new car, and standing beside it is E. E. Wilson of the Wray Motor Car company, Templar distributors here, who sold the car. Incidentally, Mr. Wilson made a sort of specialty of delivering Templars for Christmas, another Christmas Templar going to J. C. Moore of 545 East Eleventh street.

N. Y., which started five years ago to fill the anticipated demand for this type of motor car. The schedule of the Franklin company called for the manufacture of 5000 enclosed cars for the year ending this month and the possibility of increasing demand makes it probable that the figure will be nearer the 6000 mark.

The history of the American enclosed car is largely a history of the Franklin, which pioneered the enclosed car for utility purposes in this country.

### First Franklin in 1907.

The first Franklin enclosed car made its appearance in 1907 and was a limousine designed to fill a certain large-city demand. It was not until 1914, however, that the enclosed car business gained in volume. At that time the Franklin company produced its first sedan, or inside-drive enclosed car, with the certainty that as long as the enclosed type was limited to chauffeur operation it would not cut much figure in the business.

The advantages of the enclosed type for general use quickly became self-evident and the Franklin company took advantage of the demand in developing this type.

The Franklin factory just began to swing into production in 1914, when 189 cars were built. Many obstacles were overcome and the car was not put on the market until it tested true to the perfection already established at that time in the other Franklin models.

### Output Takes Jump.

The enclosed car output in 1915 was 406; in 1916 was 844, and in 1917 and 1918 it took a sharp jump to 2450. The war prevented manufacture for a time, but for the calendar year, beginning at about the date of the signing of the armistice, the enclosed car made a tremendous advance over other enclosed models, and over sedans are bought largely for year-round use. On four, the Franklin sedan makes better records than many touring cars of other types are able to accomplish, and the familiar principles of economy in gas and tire mileage are borne out to the fullest.

## KEEP SPRING CLIPS TIGHT

LOOSE PARTS CAUSE BREAKAGE, SAYS A. J. LAHER.

Spring Manufacturer Also Not Enthusiastically in Favor of Lubricating Springs.

What part of an auto or truck gets more abuse than the springs? One might name the tires. But rubber is hardly comparable with steel, and in the tire there is sufficient material allowed to permit the wear and tear of hard service, and still carry the load it was intended to carry, and to such a time, that the tire is really worn out, it has that extra material for the tire. The tire gets almost daily attention; it is constantly watched as to cuts and wear and is properly inflated.

"The spring gets attention in most cases when you hear a sharp report and the fender rests on the wheel. It is true springs do not require much attention, and for that reason they usually get none," says A. J. Laher, president of the Laher Spring company, the largest auto spring manufacturing concern on the Pacific coast.

"We are told by numerous advertisements of spring lubricating devices, to lubricate springs to prevent breakage. Some of us who are not in the spring lubrication business, do not agree with them on this point, and in fact we claim lubrication to have just the reverse effect on springs. In fact, we have never much trouble convincing a mechanic of this fact as it is quite obvious that when you take the friction away from between the different leaves that the

the car to be just strong enough to carry the load intended, for the simple reason that the spring, unlike any other part of a machine, must bend with the load. Hence, if you have two leaves broken in a ten-leaf spring, your spring has only 80 per cent of the original strength.

"There are of course many springs broken by overloading, such being the case as a rule with trucks. A truck equipped with springs intended for two-ton cannot long be expected to carry four tons.

"The bearing strain would crystallize the steel of the springs so that in a short time they will break with even a light load. Truck as well as auto springs should be reinforced with more leaves if heavier loads are expected to be carried. This is the only substantial way to take care of the matter, and thereby not only save the springs, but also the tires, frame and axles.

"In all cases, with either automobiles or trucks, it is most essential to see from time to time that the spring clips are kept tight.

## ALBANY TO HOLD A SHOW

FEBRUARY 13 AND 14 DATES FOR AUTOMOBILE EVENT.

Earl B. Day Made Manager of Motor Car Show, Which Probably Will Be Held in Armory.

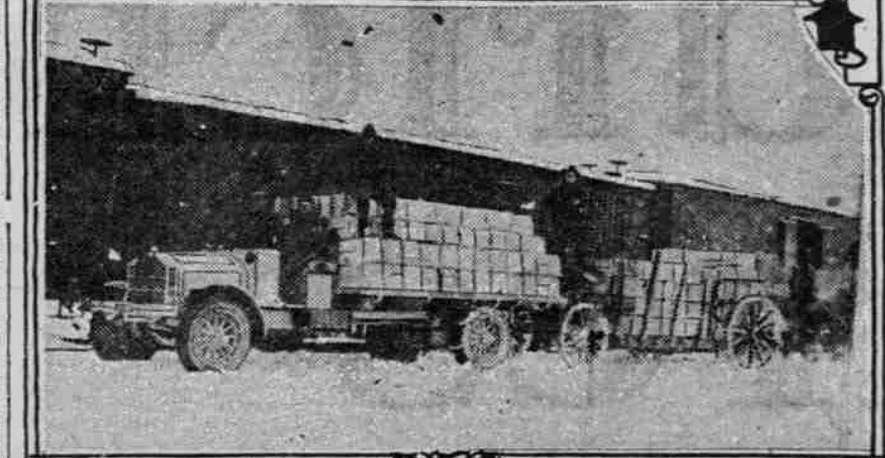
ALBANY, Or., Jan. 3.—(Special.)—Albany automobile dealers, who staged a successful auto show here last winter, will present a second annual show here and have selected February 13 and 14 as their dates. Earl B. Day, president of the Day Motor company, has been elected manager of the show, committees have been named and plans will go forward promptly. Rules and regulations—Charles Kirk, Claude H. Murphy and R. W. Tripp; advertising—Rolla Ralston, G. T. Hockensmith and Clarence Collins; show room and decorations—Claude Lewelling, W. H. Bacon, E. F. Anderson, Clarence Collins and John Anderson; and entertainment—Kenneth Carter, Floyd Shortridge and Rolla Ralston.

## GOODYEAR WORKERS THRIVE

They Get Food Staples at Prices Way Below Market.

Many large companies having the welfare of employees at heart are willing to give the H. C. of L. a knockout punch. This movement to have employers aid in the living right is gaining impetus and has spread to all parts of the country. One of the foremost in this work is the Goodyear Tire & Rubber company of Akron, O. Recently 10 tons of navy beans, 500 cases of corn, 400 cases of baked beans and 250 cases of corned beef were purchased and sold at low prices to employees.

## HAULING APPLES TO SHIPPING POINT BY GARFORD TRUCK.



The Garford truck in the picture is a 2-ton model, but it and the trailer are carrying a combined load of nine tons of apples. With the coming of cold weather the great mobility of motor trucks saved heavy losses to orchard-owners as follows: This photo was taken at La Grande, Or., which is quite an apple shipping point. The truck was operated by Paul Welch of the Welch Auto company.

## PIERCE-ARROW CHANGED

DOUBLE BATTERY IGNITION REPLACES MAGNETO.

Performance of Dual-Valve Six Is Bettered Also by This Improved Transmission.

The Pierce-Arrow dual-valve six, acknowledged to be the highest type of automobile produced, has been bettered. This is the announcement made by C. C. Fagan of the Charles C. Fagan company, Pierce-Arrow distributor.

Of the changes which mark the new models, two are distinctive. One affects the ignition system and the other is in the transmission. Ignition in the dual-valve six heretofore will be accomplished by a double-battery system, designed by the Delco company in co-operation with Pierce-Arrow engineers.

"The advantages of this improvement are manifold," said Mr. Fagan. "The new system is as reliable as the magneto-battery system and fully overcomes the difficulty of synchronization. Pre-ignition from the magneto is a serious element.

While the first element to be taken into consideration is that of convenience and safety, it may also be pointed out that the comparative facilities which a city has for the care of vehicles may have a decided bearing on its economic life as, naturally, the buyer who uses an automobile will seek the motor which he may most safely dispose of his vehicle while in the stores.

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uto at high speed no longer is possible. Instead two timers and timing units, working in unison, give sparks simultaneously at all speeds.

"Outwardly, a smoother running of the engine is more noticeable. The engine picks up more quickly and smoothly and runs more positively at low speed. An automatic spark advance eliminates the necessity of manipulating the spark-advance lever for all ordinary running.

"No sacrifice has been made in reliability. A new generator of increased capacity will meet the requirements of a battery becoming completely discharged, and only in this state would ignition be affected. A weak battery possesses sufficient current for ignition and once the engine is started the generator immediately begins to recharge the battery at a rapid rate.

"As a matter of fact, the magneto system formerly used gives no advantage in case a battery becomes so weakened that the starter fails to rotate the engine. Drivers who sometimes have started an engine by cranking when the starter failed to work have thought they were starting through the aid of magneto ignition. In reality the battery, although weakened, furnished this energy. The present engine is so large that it is practically impossible to crank it rapidly enough to generate sparking current with the magneto.

"Most important, however, is the fact that every safeguard possible to conserve the battery current has been devised. When the car is left in a locked position the battery automatically is disconnected from the engine and the head lamps are shut off. The small bulbs used for dimming purposes at night can be turned on, however. They consume so little current that there is no danger of battery depletion.

"The new double-battery system was incorporated in the dual-valve six only after exhaustive tests had been made by the company's engineers. It was adapted to Pierce-Arrow design after Liberty airplane practice had proved its reliability a most vital factor in airplane engine design. Thus it is offered to the public with a confidence that it excels the former system, besides retaining all its merits.

"The new transmission marks another forward stride of similar importance. It was designed to facilitate gear changing."

## \$70,000,000 for California Roads.

SAN FRANCISCO, Jan. 3.—California greeted the new year with \$70,000,000 available for good roads construction, according to Ben Blaw, manager of the good roads bureau of the California State Automobile association.

clation. Eleven counties have voted bonds since May in addition to the state's \$40,000,000 good roads issue.

## ANOTHER PASSENGER CAR

New York Air Brake Company Now Enters the Field.

NEW YORK, Dec. 20.—The New York Air Brake company, which entered the truck manufacturing field a few weeks ago, now plans to make passenger cars, according to a recent trade report.

The first truck was completed a few weeks ago and the factory now is turning them out in small quantities. Production will be increased gradually and it is expected that the annual output will be brought up to 29,000.

It is understood that the manufacture of passenger cars will be started immediately. The new job will contain several new patented features. Officials of the company have refused to make any announcement of their passenger-car plans at this time.

There were only four automobiles in the United States in 1896.

### MORE EVIDENCE

## BRUTE STRENGTH

That prime necessity in a motor truck—is built right into the

FRANK BROTHERTON, Walla Wall, Wash. "Also Buys a Master"

## MASTER TRUCK

1½, 2, 3½ and 5 Tons

Two Drives { INTERNAL GEAR TIMKEN WORM

## Oregon Motor Car Co.

Distributors BROADWAY AT BURNSIDE

### MORE EVIDENCE

## REO

## ZAN BROS., Inc., and The J. K. GILL CO.

Just recently Zan Bros., Inc., 52 Front St., manufacturers and jobbers of brooms, brushes, baskets, etc., were considering the purchase of a light delivery truck.

On being given the names of various local firms using REO SPEED WAGONS for delivery purposes, they called up the J. K. Gill Co. and inquired about the service their REO SPEED WAGON had given.

We do not say that Zan Bros. bought a REO SPEED WAGON solely on the recommendation of the J. K. Gill Co., but the incident serves to confirm our oft-repeated contention that

The service REO SPEED WAGONS render makes it a pleasure for users to recommend them to intending purchasers.

It is but seldom that we can offer immediate deliveries on REO SPEED WAGONS, but it so happens now. This situation will not last very long—it is advisable to secure yours without delay.

## Northwest Auto Co.

DISTRIBUTORS "The Line Complete" Alder at Eighteenth Portland, Or.

