

CORDS FOR GAS CARS LATE DEVELOPMENT

(Their Prominence Dates Only
From Five Years Ago.)

TYPE KNOWN MUCH LONGER

Goodyear Made Them Early as 1904
but for Nearly Ten Years They
Were Used on Electrics.

Now that pneumatic cord tires have made such a big place for themselves in the automobile world and have come to be regarded as the best type of tire so far developed for automobile use, much interest centers in the story of

manufacturing company, as successors to the Finselen & Kropf Manufacturing company of Chicago.

With announcement of the reorganization of the company which produces the carburetor, plans for the material expansion of the Rayfield manufacturing programme, including important improvements and perfection in production processes, are made public.

Henry Beneke, having purchased the entire interest of Frederick Finselen, becomes vice-president and treasurer of the reorganized company. Mr. Beneke comes to the company from the vice-presidency of Hibbard, Spencer, Bartlett & Co., a wholesale hardware concern with which he has been associated for the past 27 years.

O. F. Kropf, whose record as a producer of high-grade carburetors is well known to the trade, remains with the reorganized company as its active president. E. A. Bates continues as director of sales and advertising in the new organization. Reinforced with new capital, the present manufacturers of the Rayfield are enlarging both plant and equipment. Thousands of dollars' worth of new machinery, tools and die have already been installed. There have also been important additions to the engineering and manufacturing staffs.

As an example of what is already being done with the factory, making for an increased production and an even better carburetor than was produced before, is the complete rerouting of the manufacturing processes, which

CLOSED CAR MAKES CROSS COUNTRY TRIP

Nash Sedan on Run From Kansas City to Portland.

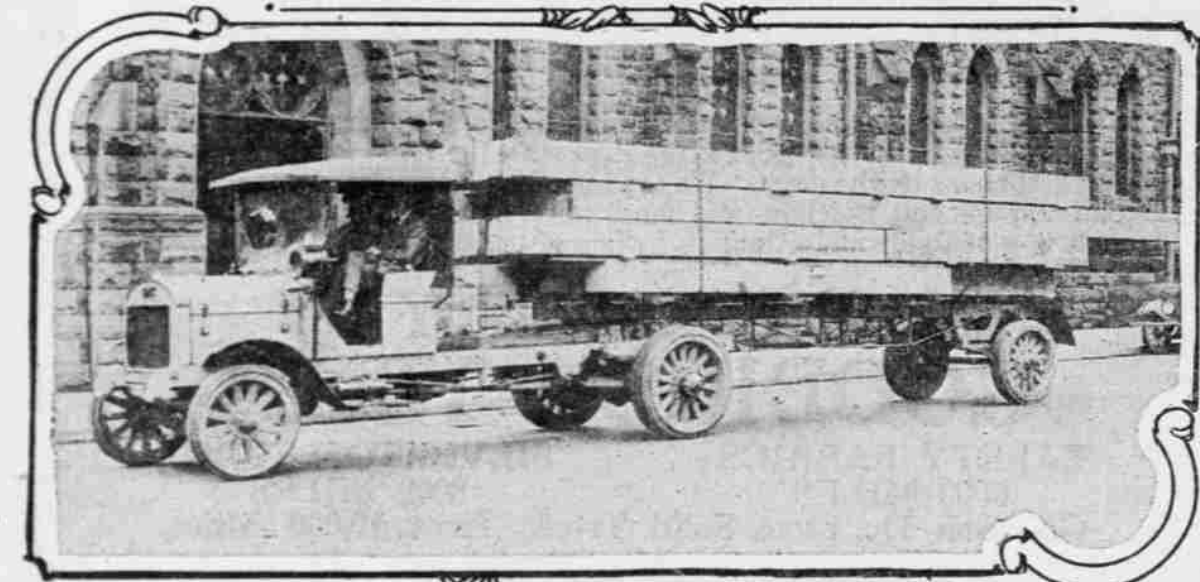
DRUMMER VISITS TRADE

G. H. Francisco, Representing Dry Goods Firm, Finds Sedan Comfort Better Than Train.

Step up, you critics of the sedan, who declare you prefer a touring car for cross-country driving. Step up and hear the testimony of one who knows whereof he speaks.

He knows, says G. H. Francisco,

FOURTEEN-TON LOAD ON THIS G. M. C. TRUCK AND COLUMBIA SEMI-TRAILER.



THE TRUCK IS ONLY A 3½-TON SIZE, BUT THE ADDITION OF THE FOUR-TON TRAILER ENABLES IT TO CARRY SUCH A LOAD WITH EASE.

Wentworth & Irwin, who are G. M. C. distributors here, built the trailer themselves. In fact, it is only one of many constructed in their own shops, which have given a fine account of themselves. During war days they turned out many of these semi-trailers for the government. The truck and trailer in the photo belong to the Portland Lumber company and are loaded with 7000 feet of bridge timbers. Truck and trailer are equipped with Goodrich solid tires.

first adaptation to vehicular use to its first adaptation to vehicular use to its present advanced state.

Cord tires have only assumed prominence since 1914, although at that time they were not new, having been made in this country as early as 1864 by The Goodyear Tire & Rubber company.

They are so called to distinguish them from the fabric type of tire which up to that time had been used universally on automobiles. In a fabric tire the body of the tire is built up of cross woven cotton fabric, or "duck," each successive layer of fabric placed at an angle of 45 degrees in its relation to the layer of fabric under it. This construction makes for extreme durability, but in comparison with cord tires is lacking somewhat in resiliency, or liveliness.

Cord Like Fishing Line.

Cord tires are not made of cross woven fabric. They are built of strong cords, similar to a fishing line, laid side by side, without any cross weave. The several layers of cords are built up on the base to furnish maximum strength. This construction permits easy flexing, or bending of the tire as it follows the surface of the street, goes far toward eliminating friction, and greatly reduces power consumption.

The first cord tires were intended for use on electric vehicles and for nearly ten years were confined to this sphere. Their advantages in this service became so apparent that tire engineers secured their adaptability to gasoline-propelled cars, and after much experimenting and refining evolved a cord tire suitable for use on these cars.

At first they were used on large passenger cars and were very costly, which caused them to be regarded as a luxury by automobile owners. But with increased use new advantages appeared and tire engineers soon were making cord tires for the medium priced car, and now for all classes of cars, no matter what the size of the wheels.

In cost per tire they exceed other types somewhat, as the construction is more expensive, but the extra mileage reduces the cost per mile and offsets the higher cost. If cord tires did nothing more than permit greater mileage than the fabric type, their existence would be amply justified.

Reduce Traveling Costs.

But as appealing a feature as the increased mileage is the liveliness of the tire—its ability to absorb the shocks and prevent them from affecting the mechanism of the car. The layers of cords yield readily to inequalities of the road and furnish the easy riding qualities for which cord tires have become noted.

The cry of the public is for better tires, less tires, fewer tire changes, longer tire life, lower cost per mile. The fabric tire made the automobile possible, but for many years pneumatic tires came in for their share of criticism. They were credited with being responsible for the high cost of motoring—and blamed for most of the motorist's trials and tribulations.

This was the condition that cord tires have overcome. And that they actually overcame it is indicated in the fact that practically every manufacturer of fabric tires has followed the lead of the Goodyear Tire & Rubber company in offering a tire of cord construction.

Goodyear cord tires are now used by all the important automobile racing drivers and hold all the world's important speed records.

FOUR NEW ROADS FOR FRANCE

Expected Tourist Flood in War Districts in View.

Four great mountain roads are to be relaid and rebuilt in the Upper Vosges, leading from France into Alsace. The commission des routes of the district of the Vosges is looking to the near future when tourists will pass that way. Largely the roads existed as strategic military mountain roads, and the present effort is in line with making them available for pleasure automobiles. Taken together, they will form a new approachable circuit and entrance into Upper Alsace.

RAYFIELD REORGANIZATION

Big Carburetor Firm to Turn Out Even Better Product.

Rayfield carburetors, which have made such an enviable record for themselves in the service of thousands of the country's best automobiles over a period of years, are henceforth to be manufactured by Beneke & Kropf Man-

is already showing greatly increased efficiency.

The present production of Rayfield carburetors has been greatly increased and when expansion measures now in progress are completed capacity will be more than doubled. Officers of the company say particular stress is upon the fact that the Rayfield, which has always been regarded as a high-grade carburetor, will be even improved in quality from now on.

They cite as an example of steps being taken in this direction the fact that each Rayfield carburetor now gets three searching tests before it leaves the factory. There is a test for gasoline leaks, a test for vacuum and the final test, in which the carburetor is belted a gasoline motor and tested for performance.

AUTO TOWLINE MADE HERE

LOCAL MEN MAKE ACCESSORY FOR CAR OWNERS.

Wire and Manila Binding Twine Combination Gives Great Strength With Very Light Weight.

One piece of emergency equipment that every motorist ought to have in his kit is a towline. If he carries nothing else, he should have a piece of common rope along with him, but it is better to have a real towline that will stand the strain of heavy pulling.

A towline so light and compact that it can be slipped right under a seat, but stout enough to withstand a strain of 8000 pounds, which is more than the average car would ever give it, is being manufactured here in Portland. Though it has been made only a month, it has so well demonstrated its efficiency that orders are coming in fast to L. G. Duff and C. O. Lauritzen of the Specialty Manufacturing company, 425 Chamber of Commerce building, who are making it for distribution through accessory jobbers and dealers in this territory.

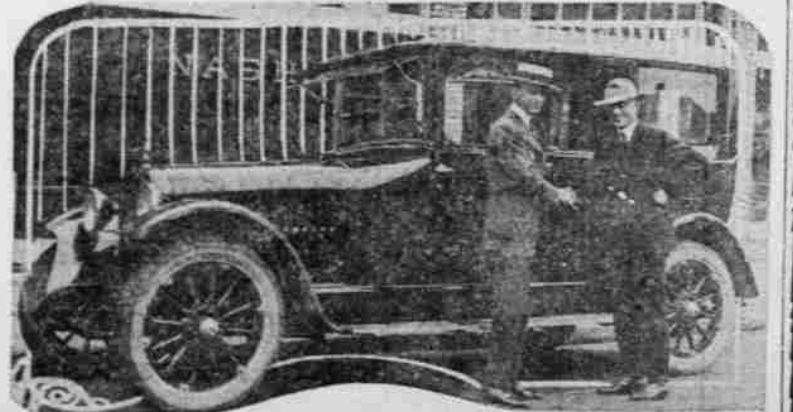
The name of this towline is the Kantabuster, and it is different from any other towline on the market. It was designed by Mr. Duff with motorist's needs in view. It is 25 feet long, of half-inch rope, and weighs only 2½ pounds.

Where it gets its strength is from the fact that woven in with the 16 strands of manila binding twine are 8 strands of galvanized wire. The combination of wire and manila rope gives great strength, combined with lightness. Before putting this towline on the market, Mr. Duff had it tested by the city bureau of weights and measures, up to 8000 pounds, which is four tons.

Old Oil for Springs.

Most car owners drain the old out of the crankcase about three times a year, and as a general rule this used oil is simply thrown away. By adding 50 per cent of kerosene to this waste oil an excellent spring lubricant is obtained. The method of using the mixture is to spray it over the springs once a week. The oil furnishes the lubricating means, while the kerosene keeps the springs free from rust.

FROM KANSAS CITY TO PORTLAND IN A NASH SEDAN.



CAR DRIVEN BY G. H. FRANCISCO ON 3800-MILE TRIP ACROSS COUNTRY. P. Ryan (right), assistant manager of the Portland Motor Car company, is congratulating Mr. Francisco on his arrival. Mr. Francisco in his 3800-mile trip called on the dry goods trade in every principal city en route. Dust did not bother him, as he traveled in a closed car.

DIAMOND T THE NATION'S FREIGHT CAR

A Product of Specialization

Diamond T Trucks are produced in the finest exclusively truck-factory in America.

The full resources of this model plant, the combined experience and technical skill of the Diamond T organization, are concentrated upon DIAMOND T TRUCKS. Specialization is almost a religion with the builders of Diamond T.

Each Diamond T unit is the best and most suitable in its class, and is rigorously tested under exacting Diamond T standards. That is the keynote of Diamond T construction and the great factor in Diamond T success.

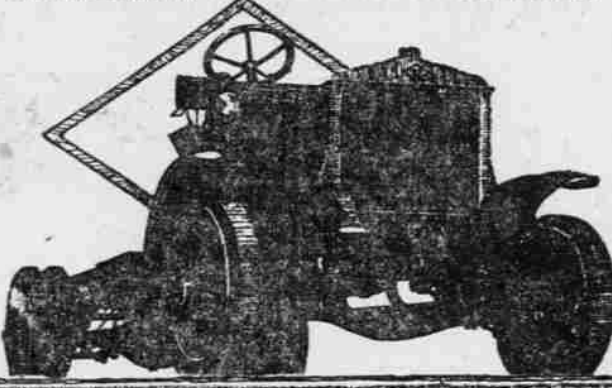
Five models—1 to 5 tons

Our New Salesroom and Service Station
AT 81 NINTH STREET NORTH
Will Be Ready July 10th.
Until Then 330 Burnside Street.

DIAMOND TRUCK SALES AGENCY, INC.

John R. Meldrum.

August Jung.



manded it is no less a problem to maintain quality than it is to turn out the cars in the required numbers; but with the increased facilities of all kinds that we shall have we are confident of achieving both goals. At present we are well under way on a very large

schedule and speeding up as fast as possible to meet the immediate demand.

Never back or swing from the curb into the street without looking back to see if the way is clear.

We Make No Charge

for testing a storage battery, no matter what make. If it needs only distilled water we'll add that gratis also.

If our inspection finds something radically wrong with your battery that can be made right we will give you an honest report on it and tell you how little the job will cost you.

Trade in Your Old Battery

We will give you allowance for any make of storage battery on the purchase of a USL.

USL batteries will fit any make of motor car.

And they last longer than any starting and lighting battery built because they are equipped with the famous USL exclusive machine pressed plates.

Authorized Service

USL Batteries
ELECTRIC AUTO LITE CORPORATION
REMY ELECTRIC CO.
SPENCER ELECTRIC COMPANY
ATWATER-KENT MFG. COMPANY
GABRIEL SNUBBERS
BLUR
MOTOR APPLIANCES
WALTHAM SPEEDOMETERS
SPARTAN HORNS
GRAY & DAVIS
CONNECTICUT TELEPHONE & TELEGRAPH

USL BATTERY SERVICE STATION

U S LIGHT & HEAT CORPORATION

Sunset Electric Co.

Automobile Electric Equipment Agents
PARK AND DAVIS STS. BROADWAY 126
In Oregon Motor Car Company's Bldg.

R.W. LEE

Auto Electrical Expert

GUARANTEED SERVICE

MOVED

From 6th and Burnside
TO

409 Burnside
Near 10th

DELCO REPAIR STATION

M. F. Rohn Will Have None But Goodrich De Luxe

The truck owners of Butte know the M. F. Rohn Teaming Company to be a carefully managed organization.

It operates five 5-ton trucks and two 2-ton trucks at remarkably low expense.

In a large measure the "down to the bone" upkeep of Rohn Trucks is due to the selection of Goodrich De Luxe Truck Tires as tire equipment.

In hauling ore—the heaviest of dead weights—and mining machinery, Mr. Rohn finds that the broad, deep strip of sturdy rubber across the TOP of De Luxe Treads gives these tires a marked advantage in cushioning qualities—and thus lessens the possibilities of damage to the mechanism of his trucks from the hammering of road and load.

Profit by Mr. Rohn's experience. Put De Luxe Tires on your trucks. Their extra rubber means greater protection and greater mileage—economy from every standpoint.

10,000 Miles Adjustment

We Sell and Apply De Luxe Tires

Leavens & Howard, Portland
W. F. Hankel, Vancouver, Wash.
Peterson Bros., Hillsboro
Ira Jorgensen, Salem
McMinnville Vulcanizing Works, McMinnville
Ackley & Miller, Tillamook
Allison & Tway, Albany
H. L. Johnson, Roseburg
Bend Hardware Co., Bend
A. W. Walker, Medford

GOODRICH De Luxe TRUCK TIRES

