

DISBURSED COST OUT BY AUTO TRUCK

Users of Cars Cite Personal Experiences, Showing Instances of Savings.

RANCH OWNERS BENEFIT

Manufacturers Using Motor Vehicles Instead of Railroads for Short Hauls, Some Covering Distances of Nearly 100 Miles.

BY GEORGE A. KISSEL. The expense of distribution is an immensely important item in the cost of living, and the great possibilities of reducing this expense through the use of motor vehicles forms a fascinating and profitable study.

Experiences that prove the time and money-saving accomplishments of the power-driven truck multiply in ratio as this comparatively new factor in the business world becomes better understood and more widely adopted. Let us select a few examples from our correspondence files.

The Carlin fruit ranch, in San Luis Obispo County, Cal., is 25 miles from the nearest railroad station, and it formerly took ten miles to haul a three-ton load there, the time occupied in the trip being three days. With a three-ton truck, the same tonnage is hauled so rapidly that two trips a day can be made when necessary. It is figured that in cost of operation and elimination of waste the truck saves \$70 a day during the marketing season.

Rancher Owns Transporter

A ranchman at Visalia, Cal., tells of hauling 3420 pounds of grapes to San Francisco, a distance of 315 miles, in 31 hours, delivering his load directly to the commission merchant to whom it was billed, thus saving the three additional loading and unloading operations necessary in transferring the consignment by freight.

A creamery at Yuba City, Cal., has a 1500-pound truck, which replaces three teams in the collection of milk and cream for market. It covers 100 miles every day, making about 60 stops, and has reduced the expense of the former horse hauling method to the amount of about \$22 a day.

Two trucks operated by a transportation company at Richmond, Pa., are doing some worth noting. One of these trucks, a two-ton Kisselcar, is used under a time contract to deliver a load of lumber to a mill in the morning. The distance is 24 1/2 miles and the time allowed is two hours. Although the roads are sometimes extremely bad, the truck has never been more than five minutes late, and usually is from 20 minutes to half an hour ahead of time.

Truck Replaces Freight Cars

A brewing company of New Britain, Conn., offers a successful demonstration of what a motor truck will save in competition with railroads. This company does a great deal of business with the neighboring cities of Bridgeport, Beaufort and Ansonia and formerly was obliged to depend upon railroad freight service for daily delivery in those places. Now, using instead two four-ton trucks, which not only make better time but deliver the product to the door of the customer. Each truck makes 75 miles daily with 12 to 14 deliveries.

There is a pickle bottling factory located at Silver Lane, Conn. The firm owns farms at Vernon and Rockville, where vegetable products are raised. Thus the hauling considerations start with the transportation of produce from farm to factory. The extent of this work may be partially realized when it is known that 10,000,000 pickles are put up from the product of these farms.

This company purchased a three-ton truck, which was intended to cover the farm-to-factory route, and a smaller truck, which was intended to cover the factory-to-city route. The management soon learned, however, that the truck is a new element in modern industry, and that it could handle the trade in nearby cities, deliver direct to customers, save time and expense, and increase the satisfaction of patrons. This truck now takes care of the company's business in the city, making 60 miles daily, and covering 100 miles, and Bridgeport 100 miles, and its ground covering ability is not yet exhausted. It is a most successful piece of the truck in regular trips to Worcester, Mass., 90 miles away.

Seven Days Are Saved

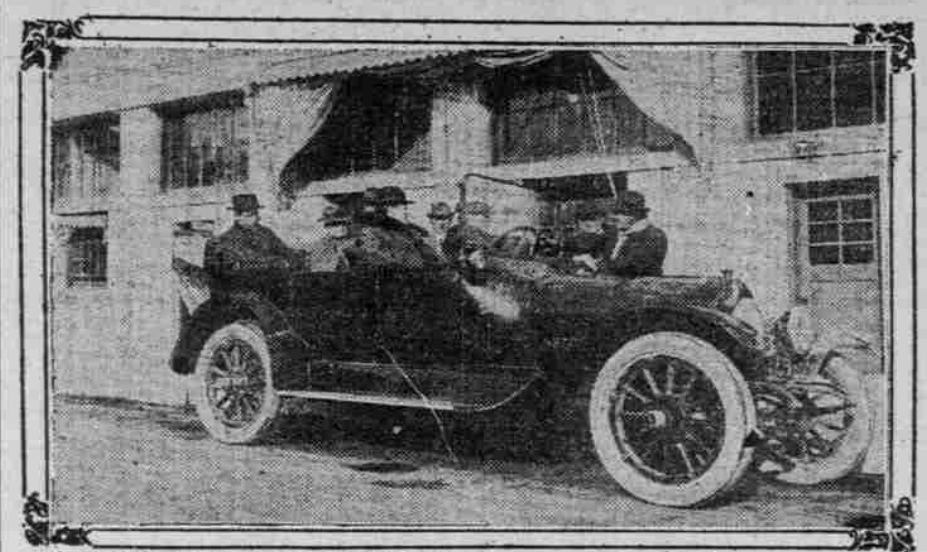
F. C. Gould, manager of the company, tells of a record which shows the manner in which the truck has saved seven days upon certain railroad facilities which it supplanted. A shipment of sauerkraut was delayed in transit because of arrival took place eight days from the date of shipment. The truck performs this service with regularity and certainty inside of two hours.

During the harvest period, according to Mr. Gould, his truck actually earned more than \$50 a day in excess of the operating cost. Based upon figures estimating a year of similar average cost on a basis of 200 working days, it is \$2500 a day. This includes 5 per cent interest on the investment, 20 per cent depreciation, wages, fuel, repairs, tires and taxes.

As an indication of what the truck may be expected to do in cross-country traffic when the state highway system becomes perfected, it is only necessary to note what it is doing under the present difficult conditions. With either mud up to its wheel hubs or plowing through heavy snow drifts from inches to three feet deep, a three-ton truck, loaded to its capacity, made its way from Troy, N. Y., to Pittsfield, Mass. The truck was owned by a general haulage concern in Troy, and the trip in question was its first. It was undertaken with many misgivings as the route traversed extended over the Lebanon Mountains, which include one steady four-mile climb with grades ranging from 8 per cent to 15 per cent. Besides many other hills, the distance is 51 miles and the route covers some of the steepest grades in the Berkshire Hills. The truck made the distance in less than 12 hours from the starting time.

That the money-saving possibilities of the motor truck are ever varying is easily appreciated by an examination of individual conditions. A firm of wholesale grocers of Fall River, Mass.,

LIGHT SIX CAR UNDERGOES STIFF ECONOMY TEST IN CALIFORNIA.



E. B. Waterman of Waterman Bros., Fresno, Cal., describes the Big Six Car in Central California, congratulating the party.

has a great deal of haulage from one of the local freight stations and, to reach their warehouses from this point, a long and steep hill must be ascended. A three-ton truck, now doing this duty, replaced five horses. The firm declares that the truck's operation does not cost to exceed \$1.25 per day, which is less than the maintenance of one horse. At the same time labor and time are both saved.

The fact that a certain number of motor trucks have replaced a certain number of horses does not convey the whole value of the change as some seem to think. As an instance of this fact, the experience of a wholesale grocery company of Woonsocket, R. I., is in point. This concern has in use two trucks, which made possible the discharging of three horse rigs. The horses together covered 45 miles a day, but the trucks are averaging 50 miles a day. It will thus be seen that while the owners abandoned only three horse rigs, the trucks are doing nearly the amount of work that seven horse rigs could do and are still capable of doing as much again.

ed R. H. Scott, general manager of the Reo Motor Car Company. The company is making an attempt to so arrange our manufacturing as to make prompt deliveries and at the same time keep our force uniformly engaged. There is no waste greater than varying between high and low production. "I aim to keep our factory running 12 months in the year, and by making practically every part that goes into the construction of our cars I have succeeded. This enables us to keep our men from year to year, and they become specialists in their particular line of work, and in this way added economies are effected by increased production as the men become more accustomed to their work. "Radical changes are expensive, they are also a big risk, and our policy has been to avoid rapid changes, but to improve as we go along, adding these improvements from time to time. "Building as we do our own motors, transmissions, rear axles from the raw material, and, in fact, every mechanical part, we effect a big saving and under our system of inspection there is no chance of a defective part being used in a completed assembly, as the system of inspection inaugurated in our factory is such that every part is watched closely in the making. Instead of the inspection being delayed until it is finished, and then rejected."

CARS CLOSELY WATCHED

R. H. SCOTT SAYS ECONOMY IS NEEDED IN MAKING AUTOS.

Manager of Reo Company Tells How Efficiency Is Gained Through Keeping Same Workers.

"Probably no one subject has created more discussion and comment than the show this year than the completeness of equipment on moderate-priced cars, and few buyers realize what rigid economy is necessary in order to effect this greatly-to-be-desired result."

AUTO TOURISTS EAGER OVER LAST LAP HOME

Logus Party, Returning to Portland From East Coast, Encounters Terrible Heat and Chill Same Day in California.

(Part XVI and last of our Mr. Logus' double transcontinental trip taken last Sunday in a small roadster auto.)—Editor's Note.

THOROUGHLY tired out, dusty with the desert travel, our very bones sore and weary, we all agreed that a rest of a day and a hot bath, Bernardino, a bath and some real good things to eat would do wonders for us all, and it did.

Leaving the city September 11 at 1:30 P. M., we headed westward once again, laying our course for Pasadena and Los Angeles, passing over fair roads for about 20 miles, the balance of the distance into Los Angeles, 49 miles, we made in excellent time, over oiled boulevards as smooth as pavement, reaching Los Angeles at 5:30 o'clock that evening, having made the run from coast to coast in exactly 30 running days.

The following day at about noon we left this beautiful southern metropolis for the north, after posing for pictures at the headquarters of the Automobile Club of Southern California. The secretary and other members of this club were extremely kind in showing us down with comprehensive road data as far north as the Oregon state line.

Chill Follows Heat. Passing through the San Fernando Valley, the heat was terrible. That evening we crossed the Santa Clara River into Ventura, and saw the grand Pacific coast for the first time. It was a most welcome sight. It had now become cold and all of our spare wraps were brought into use. That night we camped about seven miles north of Ventura, in Foster Park.

The next day, bright and early, we worked our way slowly over east and west coast roads into Carpinteria, and thence on to Santa Barbara, where we found DeLong, whom we had not seen since leaving Los Angeles. With the boy from the southland leading the way, we slowly crawled up the San Marcos pass to an elevation of 2224 feet. The pass is a most magnificent view is had of the Pacific. Following the Santa Ynez River, we soon entered the town of that name, and then a few miles later entered Los Olivos. From Los Olivos to Siquone one encounters grades of from 8 to 15 per cent, with the road fair, although dusty and hot.

Santa Maria Stopping Place. Santa Maria was our stopping place for the night, and the next morning, hiked along at a good pace over rolling grades and good dirt roads, we reached Arroyo Grande. Another spur of 40 minutes brought us to San Luis Obispo; Paso Robles came next, then

CONVICTS WILL BUILD

Eastern States Have Scheme for Improving Roads.

HONOR PLAN IS FAVORED

Officials and Legislators Will Take Up Matter—Auto Associations Are to Support Bills Now Being Prepared.

NEW YORK, Feb. 7.—(Special.)—Legislators in Maryland, Virginia, Kentucky, New Jersey and New York will discuss the advisability of road work for convicts during the Winter sessions.

In Maryland road work will be included in the broad reorganization of the prison system fathered by Governor Goldsborough. Two years ago the National committee on prison labor filed a report on conditions in the Maryland House of Correction which brought out strongly the evils inherent in the contract system of convict labor. As a result of this report a special committee was appointed by Governor Goldsborough to investigate the state penitentiary.

The commission reported "the chief penal institution of the state," and based on a principle diametrically opposed to the principles of modern penology," stating that "politics" and "the contract system" were the cause of much of the trouble. Governor Goldsborough then appointed a committee to draft the legislation necessary for the reorganization of the prison system, and requested the National committee on prison labor to make recommendations as to methods whereby prisoners could be employed without recourse to the contract system.

The committee strongly urged that the prisoners be placed on farms and roads and in the advance statements issued by the Maryland legislative committee outdoor labor is given prominence.

The campaign for convict road work in New York State will center on the scenic highways to be constructed at Storm King. Commissioner of Highways John N. Carlisle will introduce a bill into the Legislature embodying the proposition that convicts be placed in the construction of this highway. The bill will have the support of the automobile associations and the National committee on prison labor. The proposition being in accord with the suggestion made by the committee four years ago to the State Superintendent of Prisons that prisoners be employed in the work of developing the Palisade Park reserves.

The Kentucky Prison Commissioners are at present making a tour of the various convict road camps preparatory to the organization of such camps in Kentucky roads, possibly under a recent constitutional amendment. New Jersey and Virginia will provide better facilities for the conduct of the road work already established in these states.

In New Jersey special attention will be given to the problem of administration of convict road work in that state has been successful but costly, owing to the expense of maintaining the camps, and the expense of the road work.

The honor system, the payment of wages to the prisoners and other progressive principles, which have been tried in the past, have not been successful. The honor system, the payment of wages to the prisoners and other progressive principles, which have been tried in the past, have not been successful.

WOMAN MAY ENTER CAR

MRS. LEOTIA NORTHAM, OF LOS ANGELES, 500-MILE ASPIRANT.

Fair Automobile Racing Enthusiast Incorporates Herself to Meet Requirements of Association.

INDIANAPOLIS, Feb. 7.—(Special.)—The next 500-mile race on the local speedway, for the first time in history, will have a woman as one of the entrants. If the plans of Mrs. Leotia N. Northam, of Los Angeles, materialize, Mrs. Northam, who has been driving for some time, will be the first woman to enter a car in the Indianapolis 500-mile race.

The road from this point to Salinas was a deep rutted and dusty one, and even from Salinas on to San Francisco, with the exception of a few stretches of boulevard near the towns, the highway was in a great state of disrepair. We had always been led to believe that all California roads were boulevards, and on many an occasion while twisting the front wheels out of a deep rut or plowing through deep dust, I remarked: "You will have to have it on us." My sentiments were voiced by the occupants of two cars flying the Rose City banners, to whom we talked at Salinas, and who volunteered the information that the highway to Oakland was miserable.

Heavy Grades Encountered. Leaving Salinas we went over the heavy San Juan grades, passing the Oregon River and Sacramento, and through the Santa Clara Valley to San Jose, with DeLong leading.

We reached the exposition city via Del Norte, Alameda, and Fresno. At Del Norte, a Philadelphian, active in the American Automobile Association, attempted to secure recognition for the purpose of entering the 500-mile race, but failed signally. Even if the "Three A's" should give such sanction it is not likely that the speedway would loosen, as Carl Fisher, president of the race, has already given views on the subject. If at any time a woman should be injured in connection with his races he would close the track, he has often said.

Car User Has Rules for Preserving Tires

Uniform Inflation, Regular Tests, Steady Driving and Prevention of Skidding Advised.

OCCASIONALLY a testimonial letter writer produces a contribution valuable to all car users. This was the case with Dr. Thomas Hubbard, of Toledo, O., who in a recent letter to the Goodyear Tire & Rubber Company, told that his recent Goodyear experience had convinced him that the Goodyear tire was the best for the car of the tires. "The essentials of conservation of tires may in the quick delivery of packages."

The department store of W. T. Wall & Company is the first concern in California, Ill., to use a motorcycle for the quick delivery of packages.

A moving picture film is to be made of the Wisconsin motorcycle endurance run which is to take place soon.

One of the recent interesting events of the Toronto, Ont., Motorcycle Club was the annual hill-climbing contest, on the famous toboggan slides in High Park.

Harry Gurn and Miss Grace Reider, of Port Wayne, Ind., recently eloped on a motorcycle to Toledo, O., where they were married.

SAFETY FIRST

Goodrich Unit Molding was the original Safety First tire idea

The quality of Goodrich Tires today is the standard by which all high grade tires must be judged. This is because they represent the perfection of tire-making and tire-knowledge—which gives Goodrich Tires their leadership.

Every layer of the finest fabric, the livest, best rubber—the whole tire—tread, side strips, bead and all—becomes one piece in Goodrich Unit Molding—the original Safety First idea in tire building.

All this backs up the Goodrich Safety Tread—the group of bars and the cross-tie that form the Safety First symbol for the motorist.

Take no unnecessary chances. Equip at least the rear wheels with

Goodrich Safety Tires

Best in the Long Run

Here are the lowered prices on Goodrich Safety Treads that make them the best quality tire values motorists ever received. Your dealer can supply you

Size	Smooth Tread Prices	Safety Tread Prices	Size	Smooth Tread Prices	Safety Tread Prices
30x3	\$11.70	\$12.65	34x4 1/2	\$33.00	\$35.00
30x3 1/2	\$12.75	\$13.70	35x4 1/2	\$34.00	\$36.05
32x3 1/2	\$16.75	\$18.10	36x4 1/2	\$35.00	\$37.10
33x4	\$23.55	\$25.25	37x5	\$40.00	\$42.00
34x4	\$24.35	\$26.05	38x5 1/2	\$44.00	\$46.00

PORTLAND BRANCH,
The B. F. Goodrich Rubber Company
Broadway and Burnside St.

Factories: Akron, Ohio Branches in all Principal Cities

There is nothing in Goodrich Advertising that isn't in Goodrich Goods

CAR CLIMBS AQUEDUCT

BERT DINGLEY WINS DINNER BET WITH HIS KING CAR.

Big Circular Piping Over California River Is Slippery and Car Almost Falls Off When Backed Down.

By driving a car along the slippery top of the big aqueduct siphon where the Owens River is carried across Bouquet Canyon in California, Bert Dingley last week won a novel wager from Frank Young.

These two well-known sportsmen were on their way to Elizabeth Lake on their last duck shooting expedition when they decided to make a bet. "I'll bet you a dinner if I can't drive this King car up the top of the pipe," said Dingley.

"Not with this car," replied Dingley. "I'll bet you a dinner if I don't," said Young.

"All right, but you one if I don't," came Dingley's quick retort. That was enough. The bet was on. Dingley swung the little car round to where the road crossed the pipe.

In order that the feat would not be acclaimed as a fake by the disbelievers, Young went on ahead with his Kodak and got ready for the car. Just about that time Dingley admitted to having a slight yearning to have been an on-looker instead of a performer, but he could not back out and so drove the King slowly and cautiously along the slippery pipe to where the steep ascent began.

Then, he backed down again just as slowly until he reached terra firma. "Never again," was all he had to say afterwards. "I'd rather blow out my traveling at 90 miles an hour than do it once more. I got started to one side as I was backing off and I thought for a minute that I was in for a good slide. One of the would-be wits around saw the picture and said it looked like the biggest kind of a 'blip' to him. I told him to go and try it if he wanted to, but that I preferred to earn my dinners some other way in the future."

MUCH PROGRESS IS MADE

Under C. C. Aspinwall State Institution Forges Ahead.

CHEHALIS, Wash., Feb. 7.—(Special.)—During the five years that C. C. Aspinwall has been in charge of the State Training School at Chehalis, extensive improvements have been made to the school. The school includes 250 acres of land, most of which is under cultivation. A large dairy herd is maintained.

Under Mr. Aspinwall's management a \$7000 hospital has been built, \$8000 put in to the manual training building and its equipment, a \$6000 barn erected and very extensive progress made in developing the farm.

THREE CANNON ARE ASKED

Grand Army of Republic Wants Guns for Linn County.

ALBANY, Or., Feb. 7.—(Special.)—Two cannons will be placed on the grounds of the Linn County Courthouse for plans of McPherson Park. No. 1, Grand Army of the Republic, of this

MOTOR QUESTIONS AND ANSWERS

Oil in the Combustion Chamber

Q. A great deal of oil works up past the piston into the combustion chamber of the cylinders of my engine, causing a lot of carbon. What is the reason for this?—C. R. V.

A. The presence of oil above the piston and the resulting carbon deposit in the combustion chamber is due, very probably, to the condition of your piston rings in the motor. The usual type of one-piece rings found on most pistons has faults in design that allow this to occur as soon as they become slightly worn. Their bearing on the cylinder wall grows unequal and their ends work into alignment around the piston head providing free ingress for surplus oil.

The single-chamber piston rings we know of that will obviate this completely and finally is the Levee Piston Ring. This is a ring composed of two interlocking sections, each one closely sealing the opening in the other. These sections have opposite points of expansion and thus obtain perfect and equal tension against the cylinder walls. They are the only really leak-proof rings made.

You can get them any size at all garages and repair shops—they are easily adjusted. The following supply houses are distributors: Portland, Ballou & Wright, Broadway at Oak. Seattle, Ballou & Wright, 817 E. Pike St. (Adv.)