

EPOCH IN AMERICAN AUTOMOTIVE INDUSTRY TO OPEN WITH RETURN OF YANKEE SOLDIERS

[Editor's Note—We present as an exclusive feature in the west, a series of articles on "Highway Transport" written by an army man who is an authority on the subject. These articles will appear each week in the Capital News auto section.]

By WARREN B. BULLOCK (Late Captain, Motor Transport Corps, U. S. A.)

Highway transport is the name of the new epoch in the American automobile industry.

The motor truck has come into its own, as a result of the war, and the greatest single development of the motor industry has marked the comparatively few weeks since the war was ended.

And back from the American army of soldiers is coming a new army of highly trained motor vehicle men, chauffeurs, repair men, executives, a hundred thousand and more of them. Not a single state in the union will fail to feel the thrill of a new life in its highway development with the return of these disciplined, often times battle-scarred chauffeur-soldiers.

MOTOR TRUCK A SUCCESS.

The motor truck, with its unlimited opportunities for short distance and long hauls, has been a demonstrated success by Uncle Sam on a scale never before possible for any single manufacturer or even any group of manufacturers.

The motor transport corps of the United States operated a grand fleet, in groups of thousands, in smaller units, and as single vehicles for miscellaneous delivery.

With the end of the war there is a revolution in the personnel of the automobile industry. The war with its breaking down of many phases of American business life, has in the automotive field broadened the industry, and opened the field to a perspective never before realized.

The human and mechanical elements are both affected by this revolution. When the United States went into the war, it was with the motor truck as an innovation, hardly beyond the experimental field, from a military standpoint. Today the war has demonstrated the truck as a carrier for long and short distances, in huge fleets, as a rival of the rail transportation, a dangerous rival for short haul work.

In the human side of the revolution, is the return to the industry of men trained in the broad field of the motor truck as seen in the war, a veritable army of trained automobile experts coming back to operate trucks, and garages, men who really know the machine they drive as no one in ordinary civil life can come to know the heart and soul of his vehicle.

COUNTRY WAS SEARCHED.
One of the greatest things in America's prosecution of the war was the manner in which the country was

searched for fit men for motor transport service. The universities, the farms, the oil fields, the cities alike were canvassed for volunteers for this service. Rich men's sons were educated with the boys of the poor, and then sent across to drive trucks hundreds of miles with big cargoes of supplies, to convey troops under fire along the front of the fighting armies, and these are the men who are coming back to make highway transport the biggest thing in the American transportation world. When America entered the war, the entire army was only about 100,000 men. When the war ended, there were nearly twice that number in the motor transport corps alone.

At first the men for this corps were taken from garages, from taxi companies, taken wherever there were men to be found who knew motor vehicles. The supply of trained chauffeurs who could enter the army was soon short of the needs. Then the American universities came into the field. Among the first was the Purdue university at La Fayette, Ind. A motor school was opened there. Various technical motor schools as at Kansas City and Pittsburgh, threw their resources into training men for the service, and when the armistice came there were nine great centers for preliminary training of men for this corps ready for establishment west of the Mississippi alone.

Meanwhile, the training progressing in some 30 cantonments and army camps, was being standardized by the motor transport corps headquarters at Washington where Brig. Gen. Charles B. Drake, had been named as chief of the corps. On the other side, Col. Pope, one of the early advocates of extensive motor military transportation, like Gen. Drake, was operating the motor fleet on the lines of the French transport system. In America General Drake called together educators, and specialists in motor transportation, and prepared for the establishment of training schools for officers and men. On the other side, such schools were being conducted for men already with the A. E. F.

EDUCATION SPREADING.
A wonderful schedule of education was worked out, with a vehicle school at Camp Jos. E. Johnston, Fla., and an administrative school at Camp Meigs, Washington, D. C., half a dozen circuit schools, and a Chautauqua circuit to spread the gospel of standardized motor transportation into the cantonments.

The standardization of the American methods with those of the A. E. F., and French transport was worked out with a fleet of about 300 vehicles at Camp Johnston, where men were trained in convoy work on the lines of the French transport, which proved its value first at the Marne, then at Verdun, and finally in the great rush which broke the

last stand of the Germans and caused their abject acceptance of the armistice terms.

And the hundred thousand American trained soldier chauffeurs coming back to enter, thousands of them, the new field of highway transport, were thus being welded together in the standardized methods of handling trucks in great fleets as used by the French, British and American armies. To appreciate the volume of the truck movement in the army, it can be said that in the British offensive of 1917 on the Aisne, there were over 5,000 trucks in a single formation.

How these men were trained is another story. They are back to get their share in the prosperity and progress to be found in the motor truck operation field, for large fleet owners, as well as for the man who runs a single vehicle.

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(Next week—Dispatching Trucks for Short Hauls.)

2,240,000 POUNDS OF RUBBER FROM COAST

One of the greatest shipments of rubber ever received in America in a single lot is proceeding across country from San Francisco to Detroit in a special train of 26 cars. The weight of the shipment is 2,240,000 pounds.

The rubber is consigned to the Morgan & Wright tire plant of the United States Rubber company. It arrived in San Francisco from Singapore on the Siberia Maru on March 1, and represents part of the large accumulations of crude rubber held back in the Far East by the embargo on importations.

To the rubber expert a shipment of this size is a matter of amazement more than to the average man unacquainted with the infinitely slow processes by which such stores of rubber are built up. The shipment in question represents the entire production of about 500,000 rubber trees for an entire year, and the labor of more than 1000 men for the same period.

Every working day of the year the tappers visit every tree, collecting the latex and making fresh cuts in the bark. From the new cuts the valuable rubber fluid begins to drip into the porcelain cups. Any one watching the slow drip would marvel that so slow a process could ever produce a trainload of crude rubber. Each tree's contribution is less than two-tenths of an ounce of rubber a day, or about four pounds a year.

The great plantation of the United States Rubber company in Sumatra, with its 70 square miles of trees and its 15,000 employes occupies a strategic position among American rubber manufacturers.

PHONE 73 for baggage wagons. Prompt service. Peasley Transfer & Storage Co.—Adv.

CYCLIMIZER WILL ADD TO MOTOR EFFICIENCY

Invention of Portland Architect Assists in Carburetion—Keeps Carbon Down to Minimum and Gives More Power.

One of the great problems faced by motor-car makers is the efficient carburetion of the low-grade gasoline now being sold. The rapid growth of the motor-car industry has forced oil refiners to lower the grade of gasoline in order to supply the demand for fuel.

With this lowering of quality of fuel have come many devices to increase the efficiency of the carburetion system so that the motor will be able to run on this gasoline with the minimum loss of power.

When low-grade fuels are used the amount needed to run the motor is excessive and the cost higher than with high-grade fuels in proportion. The reason, of course, for the increased amount is that the fuel is not properly gasified and large amounts of raw fuel are sucked into the cylinders and not consumed. This fuel is not all burned when the explosion in the cylinder takes place and much of it seeps past the piston rings into the crank case and dilutes the oil thus reducing the efficiency of the motor.

The average carburetor is not able to make good fuel from the stuff used nowadays unless it is helped along with some device that forces the fuel into the cylinders as a pure gas.

There is a device now on the market called the "Cyclimzer," which is installed between the carburetor and the intake manifold on the motor and forces the gas into the cylinders under great pressure, thus insuring complete breaking up of the fuel into gas and complete combustion.

Numerous tests made on many different makes of cars show that this invention will clean dirty spark plugs in a few hundred miles of running and will practically eliminate carbon in the motor. Carbon is caused by incomplete combustion of the fuel in the cylinders. When the fuel is only partially burned there is a residue left which soon accumulates and then loss of power results and every other ill that motors are heir to.

This Cyclimzer is the invention of E. E. McClaran, a well-known architect of Portland, Ore. McClaran had trouble with his automobile on account of the low-grade fuel he was using and put his wits to work and devised the Cyclimzer. He took the name from the effect of the invention on the fuel. The gas is blown into the cylinders with the force of a cyclone, thoroughly gasified and ready to be entirely consumed when the spark ignites it.

A study of the carburetor showed McClaran that the trouble was in the carburetion system, because even kerosene will make a highly explosive mixture if properly gasified and mixed with air. When the gas leaves the spray nozzle in the carburetor it hits the throttle valve, which, like the damper in a stove pipe, regulates the amount of gas and air entering the manifold. It throws the gas against the side of the manifold, which is round and tends to bunch the gas in a knot, in liquid form; also there is nothing between the carburetor and the motor to break up the gas, and much of it goes into the motor in liquid form.

When this mixture containing some raw fuel gets into the cylinders only the part that is pure gas is exploded. The liquid seeps into the crank case and dilutes the oil.

The Cyclimzer, placed between the carburetor and the motor, forces the fuel into the motor in a finely divided gas, thus making it possible to burn all the gas, eliminating carbon troubles and a whole list of motor ills resulting from carbon.

SIXTEEN RACES ON THE GRAND CIRCUIT PROGRAM

Philadelphia, Pa., March 22.—There will be 16 races on the program for the Belmont Driving club's third grand circuit meeting, which will be held August 11 to 16. One-half of them will be early closing events, the first one on the list being a \$5000 purse for 2:11 trotters. The trotters will also appear at Philadelphia in a \$3000 purse for the 2:05 class, \$2000 events for two the three-year-olds and the 2:16 class, as well as a \$1000 race for horses owned in Philadelphia county, while the pacers will start at the Philadelphia meeting in the 2:06 class worth \$2000 and 2:12 class worth \$2000.

It has often been remarked that the average car owner knows too much about the motor and that this knowledge tends to make him forget and neglect the clutch, gear set and the rest of the power transmission system. Certain it is that universalis, brakes, wheel bearings and many other not easily accessible parts are generally forgotten until something goes wrong with them. The owner does not wait for a bearing cap to fall off before he fills the crank case with oil, and similarly he should not wait until there is play in the universalis before he gives it a supply of grease and graphite. It is difficult to keep the universalis well lubricated, even when the housing is periodically filled. Similarly there will be no propeller shaft and play in the propeller shaft assembly or clutch if the parts are properly lubricated and kept so from the start. Give a weekly oiling to the joints in the braking system from pedals to hands; repack the wheel bearings four or five times a year, after washing out the bearings with kerosene. Finally keep your eyes open for special lubricating hints and try them all, so the transmission system will run just as sweetly after continued use as the engine does.

AUTOMOBILE'S POWER DEPENDS ON BEARINGS

Horsepower Is Net Result of Force on Rear Wheels States Builders of Chandlers in Recent Pamphlet.

Horsepower of an automobile, according to a recent pamphlet published by the Chandler Motor Car Company and now being distributed locally by the Service Motor Company, Bockstead & Arthur Bros., Chandler distributors, depends, "not on the bore and stroke, but depends entirely and only on the net power transmitted through the bearings to the rear wheels."

The Chandler builders, in publishing the pamphlet referred to, emphasize the essential characteristics of the car, which make it a "smooth, silent, running, clean and powerful motor," such as it is claimed are found only in the highest grade cars that are manufactured today. Explaining the source of horsepower, the Chandler builders say:

"Greatest of all anti-friction devices known to engineering science is the annular ball bearing. It performs the greatest service with the highest ratio of efficiency. Ball bearings show this remarkable superiority because they operate with a pure, rolling motion. The ball is the only type of bearing in which pure, rolling motion only is present. It marks the last stage in bearing development. By way of comparison the frictional resistance encountered in its nearest competitor is several times greater than in ball bearings.

"Annular ball bearings are self-contained tamper-proof units. They do not require adjustment because they are always permanently in correct adjustment for long, hard, dependable service. They are nearly frictionless, therefore least susceptible to wear."

Let us mount your head and tan your hide. R. W. Lambert, Boise, Ida. If

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UNITED STATES SPRUCE PRODUCTION CORP.

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Trailers, 2 1/2 to 5 ton, \$400 to \$1,000.
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Also a few passenger cars of other makes. All cars carry prices plainly marked. Come and see and buy.

For further information address Automobile Department, Sales Board, United States Spruce Production Corporation, Yeon Building, Portland, Oregon.

AUTO OWNER, WATCH YOUR MOTOR'S STOP

It Should Never Be Folded When Wet or Damp—Never Use Gasoline to Remove Grease or Dirt.

It is peculiarly timely at this season of the year, with the spring rains just ahead, to remind the car owner that the top should never be folded when it is wet or damp, as this will cause the formation of mildew and ruin the fabric. Gasoline should never be used to remove grease or dirt from the top, as it ruins the rubber composition and causes blisters. A leather top should be washed with castile soap and water, the latter a little warm, and a top dressing should be applied.

In fitting a new carburetor be sure that there is no looseness to cause vibration, because if there is a broken flange will be the inevitable result. If vibration is present a small iron bracket should be installed from a nut on the engine frame to the instrument to steady it, also taking the strain off the intake pipe.

Here is a suggestion for straightening a garage door that has begun to sag, which is better than the ordinary method of planing off the bottom. Drive two heavy nails in opposite corners of the door and run some lengths of heavy wire between them. Slip a couple of blocks of wood under the wire and then take another spike and use it a turnbuckle in the center of the wire. This will draw the bottom of the door up, so that it will fit its frame properly. Finally drive the turnbuckle spike in the center of the door and the cure for sagging will be permanent.

A small brush, say five inches long, with stiff bristles, may be made into an exceedingly useful tool by screwing it on the end of a handle perhaps a foot and a half long. With this brush it is easy to clean off spring leaves and to get at other parts that are located in inaccessible places.

ANNOUNCEMENT

We are Factory Distributors in Southern Idaho and Eastern Oregon of Oldsmobiles and Republic Trucks. As permanent citizens of Boise, we will establish a permanent, reliable, well franced business institution in this city. We believe in the future of Boise and of the State of Idaho with sufficient conviction to invest our money and cast our fortune with that of this Commonwealth. We are experienced in the automobile business and our fundamental policy will be a square deal in every transaction. We shall offer our merchandise and our services with this pledge on our part.

- ### OLDSMOBILES
- 6-cylinder 5-passenger Touring Car.
 - 6-cylinder 2-passenger Roadster.
 - 6-cylinder Sedan or Coupe.
 - 8-cylinder 7-passenger Touring Car.
 - 8-cylinder 4-passenger Pacemaker.
 - 1500-Pound Capacity Speed Truck with Pneumatic Cord Tires.
- Prices on these models guaranteed to July 1st.

The Oldsmobile needs no introduction. Its unusual merit as a medium priced car is known to every motorist. It is in its 21st year of success. It is a manufactured car and is one of the members of the General Motors group. The Olds sets the pace.

- ### REPUBLIC TRUCKS
- Built in 7 different models, from 3-4-ton up to 5 tons, with bodies suitable for every hauling requirement. Price of Chassis from \$1095 f. o. b. factory, up, depending on capacity. Also special chassis and bodies for special hauling conditions, including all kinds of motorized fire equipment.
- The Republic Motor Truck Co., of Alma, Mich., is the world's largest manufacturers of motor trucks. Their long experience and large production insures a Republic Truck user better value and service.

Several car loads of automobiles and trucks now in transit from the factory will arrive in a few days. Within a short time we will have a large complete stock of Oldsmobile and Republic repair parts in stock, so we will be in a position to give immediate service to the several hundred users of these two popular lines in this vicinity, and to those who become users from now on.

DEALERS: If Oldsmobile or Republic are not properly represented in your town, write or wire for profit-sharing proposition.

We will be in our new quarters by April 1st, in the north room of the main floor of the Empire Building, which is being remodeled for our requirements. We cordially invite you to come in and assure you that it will be a pleasure to show you our merchandise.

KING MOTOR COMPANY.

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ANOTHER LIVE WIRE

With the Idaho Electric Supply Co.

Mr. T. J. McCarthy, who has been associated with the Western Electric works and J. C. English Co., of Portland, Oregon, for the last twenty years and has handled the electric construction in Portland's largest building work, will arrive in Boise on or about April 1st, as manager of our electric supply department and thus add another circuit to our shop of efficiency. Mr. McCarthy succeeds Roy L. Walker, who resigned March 15th.

The Idaho Electric Supply Co. has always been the largest independent electric supply house in southern Idaho, covering every branch of the electrical business with men who know the business. Efficiency is the test of time and many of our force have grown up in the electrical world. We are indeed pleased that Mr. McCarthy has chosen Boise as his future abode as those electrically inclined will find a man fully informed on everything electrical.

We would be pleased to have you call and meet Mr. McCarthy and we know that he will enjoy meeting you.

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