

PENNSYLVANIA H. C. L. ATTACKED BY TRUCK

PHILADELPHIA, Pa., May 3.—Within a few days, according to an announcement by the postoffice officials here, 50 to 60 motor trucks will be running to this city from nearby rural points, carrying fresh farm produce to the consumer direct from farms. The trucks already are being operated on six routes. Returned soldiers are being used as drivers. Eggs, poultry and vegetables form the bulk of the merchandise thus transported. The territory covered by the trucks ranges from eastern Maryland to central Pennsylvania.

All the consumer has to do is to order what he wants from a farmer on the list posted and the postoffice will do the rest. The person ordering the goods pays the postage. The charges are 5 cents for the first pound and 1 cent for each additional pound. Several large army trucks have been turned over to the local postoffice to be used for carrying the larger shipments.

When select fresh eggs were selling in Philadelphia groceries at 50 to 60 cents a dozen, a motor truck, the first in the local experiment, arrived from the Lancaster farming region with eggs for householders at 35 cents. The first stop was at the Commercial museum. The truck carried 85 crates of eggs, weighing 4,200 pounds. The truck left Lancaster at 6:30 the previous day and arrived at 4:30 p. m. The eggs actually cost 32 cents, with 3 cents for postage. Fifteen separate operations and several days are thus saved by motor truck transportation of farm produce.

Highways Transport Links Farms With Market

The people of our land were never able to deal as comprehensively with the problem of highways development and highways transport as today. For now, as a result of war's challenge and the demands upon all producers for their utmost endeavor, we know where people are in greatest need of additional transportation facilities. And from experience gained before and during the war, we have seen the manner in which highways transportation can be harnessed most effectively to the service of our people.

"Take the great problem of rural highways transportation," cites W. O. Rutherford, vice president of the B. F. Goodrich Rubber company, "and consider a concrete and definite need that presented itself in the state of Utah during the war. In the vicinity of Loa, Wayne county, back seventy-five miles from the railroad, several carloads of fat hogs were available for market, but there was no means of shipping them to the nearest rail point. The solution was found by improving the highway to carry motor transport, the hogs were moved rapidly to rail shipping point and an additional food supply therefor made available. And the solution of this problem had the effect of moving the whole back country, a vast area in itself, up closer to the railroads and the markets of the world. While the exodus of the hogs symbolized the creation of new wealth in Wayne county, the transport service was able to return from the shipping point to Loa with the wares of our great industries, thus providing a larger market. Hence highways transports linked up the forms with desired markets. It also spelled opportunity to the great body of loyal workers in America in that it provided for a larger field to be supplied by the indispensable products of their hands."

P. O. GETS ARMY TRUCK

The postoffice department struck a gold mine. The war department has at last presented it with 1,200 army trucks of various types and sizes for use in rural mail delivery. The routes to be covered by these vehicles have not yet been decided upon, but undoubtedly will be announced in the near future by the department.

S. A. E. PLANS MEETING

The summer meeting of the Society of Automotive Engineers will be held at Ottawa Beach on the east shore of Lake Michigan, six miles from Holland. The society has secured the exclusive use of the Ottawa Beach hotel and cottages for June 23-27. Accommodations will approximate 1,000 members and guests.

The Automobile Simplified

By FREDERICK C. GUERLICH, M. E.

Make This Your Automobile Correspondence School

An intimate talk on the working units of the automobile discussed in such a way that the layman can easily understand them. If in reading these articles, as they appear in the Palladium each Saturday, there is anything not clear to you, ask Mr. Guerlich about it. An answer will be published on the completion of the articles on the section of the automobile under discussion.

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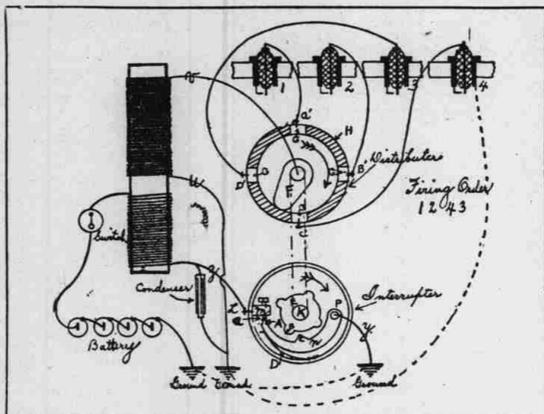
LESSON NO. 7. Distributor System.

From previous lessons we saw that, in order to have the current jump across the spark plug points, we had to have a very high voltage, and we learned how the induction coil transformed the low voltage into high voltage.

You will recall that the transformation of the current from low to high voltage occurred the moment the core was magnetized or demagnetized, and that the core was magnetized or demagnetized by sending a current of electricity through the primary coil, or by stopping the flow of this current respectively.

The faster the core is magnetized or demagnetized, the more intense will be the secondary current.

As the flow of the current can be more quickly stopped and thus the core more quickly demagnetized, practically all ignition systems must have some device for stopping or interrupting the flow of the primary current. In the Distributor System this device is called the Interrupter.



The Interrupter.

In the sketch herewith, an interrupter is shown. The cam "E" is fastened to a shaft, which is made to revolve, the usual practice being to drive it from the cam shaft of the engine. This cam E, you will notice, has on it 4 offsets or hammers (B), (there will be six on a six-cylinder engine), which will strike the point C on the arm N, thus pushing this arm downward. You will also notice that the arm N can swing on the pin P, and that the other end has a point (A), which rests against the point (A), it being pressed against by the spring D. Thus as the cam E revolves, each time a hammer hits against C, the arm N is driven downward and the points (A) and (A) are separated.

Now, if a current of electricity were sent through the wire Z, it would enter at the terminal L, pass through the bracket M, through the points (a) and (A), the arm N, to P and out through the wire Y. When, however, the hammers on E hit the point C, thus separating the points A and A, this circuit will be broken, and the current interrupted.

We are now ready to study what is known as the Distributor System of Ignition, a system, if we exclude the Ford cars, which was furnished on about 80 per cent of the cars built in the last few years.

This system has two circuits, a primary and secondary. Let us see what units there must be in the primary circuit, and then the units there will have to be in the secondary.

In the primary we must first have a source of current, which usually is a storage battery. As the engine is stopped by stopping the spark, we must have a switch which is near the driver's seat so that he can disconnect the battery at will. We must have a coil of wire around the core, and we must have an interrupter. The drawing shows how these units

are assembled. The current will start at the battery, then go through the switch, then through the coil about the wire Z, the interrupter points A and A, the arm N, and back to the battery by way of the wire shown as a dotted line.

Every time the above circuit is broken by the interrupter points (A) and (a) separating, there will be a shot of high voltage in the secondary, which will start on the coil and go through the wire V. This current must go to the spark plugs, and, in a four-cylinder engine, to four plugs at different times, and in a certain order, that is, the Firing Order. Here is a difficulty to be overcome, as we have but one wire, and four plugs to get the current at different times. How can we overcome it?

The Distributor.

We can overcome this difficulty by having a revolving switch, which will switch or distribute the current to the plugs in the required firing order. Such a switch or distributor, as it is termed, is shown in the drawing.

This is a drum, the shell, H, of

which is made of an insulating material, but which has inserted in it at regular intervals metal pieces, having binding posts for a wire. Revolving inside the drum is a Rotor, made

BAD STOMACH; NEARLY STARVED TO DEATH

Mr. and Mrs. Hampton Both Eat Anything They Want Now.

"I have had stomach trouble and constipation for 3 years. I could not eat anything and almost starved to death. After I began to take Milks Emulsion I began to eat anything I wanted. I feel like a new woman and am doing my own work again."

"My husband also was badly afflicted with stomach trouble and for a long time lived on soup and light diet. Eight bottles of Milks Emulsion cured him and he now eats anything he likes as much solid food as he likes."—Mrs. George Hampton, 503 North 12th St., Charleston, W. Va.

Thousands of people have used Milks Emulsion with the same result that Mrs. Hampton describes. It costs nothing to try it. Guaranteed. Milks Emulsion is a pleasant, nutritive food and a corrective medicine. It restores healthy, natural bowel action, doing away with all need of pills and physics. It promotes appetite and quickly puts the digestive organs in shape to assimilate food. As a builder of flesh and strength, Milks Emulsion is strongly recommended to run-down nervous people, and it has produced amazing results in many cases of tuberculosis of the lungs. Chronic stomach trouble and constipation are promptly relieved—usually in one day. This is the only solid emulsion made, and so palatable that it is eaten with a spoon like ice cream. A truly wonderful medicine for weak, sickly children. No matter how severe your case, you are urged to try Milks Emulsion under this guarantee—Take six bottles home with you, use it according to directions and if not satisfied with the results, your money will be promptly refunded. Price 60c and \$1.20 per bottle. The Milks Emulsion Co., Terre Haute, Ind. Sold and guaranteed by Thistlethwaite's 6 Drug Stores.—Adv.

of good conducting material, which will come in contact with the metal pieces above referred to they are called segments) can after the other.

If the main, secondary wire V be connected to the center of the Rotor F, as this rotates, it will send the current to the plugs in the order in which the wires are connected to the segments. In the drawing segment a is connected to the wire of Plug 1, b to the wire of Plug 2, c to Plug 4 and d to Plug 3. Thus the current will go to the plugs in this order and the cylinders will be fired in this order.

The distributor is usually placed immediately above the interrupter, the interrupter cam and the distributor rotor being on the same shaft, but insulated one from the other. They are so set, that the rotor is in contact with one of the segments every time one of the hammers of the interrupter hits the piece C of the arm N, or, in other words, every time the primary current is interrupted.

To again trace the secondary current, we find now that it starts at the coil, then goes to the distributor where it is distributed to the plugs, in the firing order, and must now return to the coil so as to complete the circuit. Instead of running a wire back from each plug to the coil, the plugs are screwed into the cylinder and the current is allowed to return through the metal of the engine to a single wire which comes from the coil and is somewhere connected to the engine, or, as we saw in a previous lesson, through the ground.

In most systems the Primary current is also allowed to return through the ground. Thus, in the drawing, one wire from the battery is grounded, and the arm N is grounded, so that the current goes from N to the battery wire through the ground. There will, however, be no wire from P, as shown, the pin P being of metal, thus, unless insulated, it is grounded.

Let us again review this system. If we want to start the engine, we close the switch, thus an electric current will flow from the battery through the switch, the coil, the interrupter and then through the ground back to the battery.

If we now crank the engine, we will also make the shaft K, on which both the interrupter cam E and Distributor Rotor F are fastened, with the result that one of the hammers

NO MORE RUNNING SORES

Thistlethwaite's 6 Drug Stores Sells An Ointment Called San Cura That Is a Positive Relief. It matters not how old, persistent or poisonous the sore is, San Cura Ointment, the powerful antiseptic, will draw out the poison and promptly heal the sore.

So sure of this are the owners, the Thompson Medical Co., that they have authorized Thistlethwaite's 6 Drug Stores to return the purchase price if San Cura Ointment doesn't do all this paper says it will do. No fairer offer was ever made.

B. D. Dutton, Titusville, Pa., says: "My arm was covered with twenty-four running sores and swollen to twice its natural size. San Cura Ointment relieved the pain, drew out the poison and healed the arm in an incredibly short time. It is the greatest compound for healing I ever used."

The healing powers of San Cura Ointment are little short of marvelous. It gives relief, and is guaranteed to help salt rheum, eczema, bleeding, itching or protruding piles, ulcers, boils, carbuncles, chapped hands and chilblains. In cuts, burns, scalds and bruises, it allays pain and is healing. 30c, 60c and \$1.20 a jar. By mail on receipts of price, if your druggist is out of it or does not keep it.

SAN CURA SOAP

For tender, itching or irritable skin wash with San-Cura Soap, the antiseptic soap that soothes and heals, and kills germs of disease. Great for pimples, blackheads, and makes the complexion clear and attractive. 25c at Thistlethwaite's 6 Drug Stores. Mail orders for San Cura Ointment and Soap filled by Thompson Medical Co., Titusville, Pa.—Adv.

B will hit the point C and thus interrupt the primary circuit, and there will be a shot of high voltage current through the secondary wire V to the Rotor F and out through that segment G with which the rotor is in contact; this current will then go through the wire fastened to it to the plug, where it will jump across the points, giving a spark as it does so.

The engine and distributor shaft are coupled together, or timed, in which the spark comes, will have the piston up, just ready to start on the power stroke. Thus the engine will now run, and shaft K revolve, so that each time a piston is up and ready for the spark, the primary will be interrupted and the Rotor F so set as to send the current to the correct cylinder.

In the drawing a condenser is

shown, the purpose of which is to prevent the burning out of the interrupter, or, as they are often known, platinum points. This will be explained later.

It is unpatriotic to hammer prices down, by refusing to buy American products.

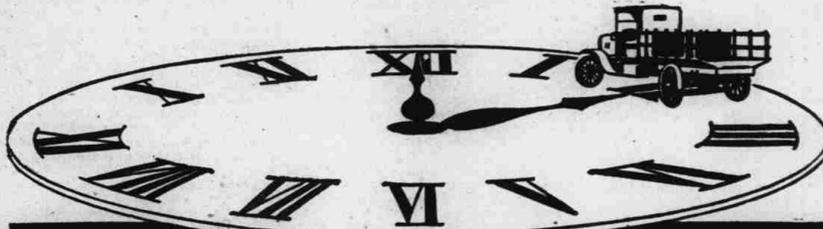
According to figures presented by Pauline Goldmark, manager women's service section, United States Railroad Administration, the number of women employed by steam railroads has increased 40,000 in 10 months.

A MISTAKE MADE BY MANY
Don't wait for rheumatism to indicate diseased kidneys. When you suffer pains and aches by day and sleep disturbing bladder weakness by night, feel tired, nervous and run down, the kidneys and bladder should be restored to healthy, strong and regular action. It is a mistake to postpone treatment. Foley Kidney Pills put the kidneys in sound healthy condition and keep them active and strong. Begin taking today. Good results follow the first dose. For sale by A. G. Luken & Co.—Adv.

FOR THE BLOOD



At All Drug Stores



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IS IT held up through breakdowns—accidents or at the loading platform? Lost time increases your haulage costs.

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To keep the truck moving as steadily as the hands of the clock is the great object towards which every motor truck owner should work.

Delays come from two sources—from the truck itself, and from imperfect operating systems and routing methods.

In purchasing a Clydesdale Truck you eliminate both of these causes of lost operating time.

You get a truck built with the great strength and durability in every part to enable it to operate months at a time without seeing the inside of a repair shop or service station. You can depend on it that your Clydesdale will cause no delays in operating time.

Of equal importance is the

service which we give you with the truck. We believe that motor truck service should go beyond the mere replacement and repair of parts.

Our kind of service means helping you to eliminate delays in the operation of your truck—improving your methods of handling it, helping you with your routing problems—cutting out every moment of unnecessary idle standing time.

The Clydesdale Truck will keep moving if you give it a fair chance.

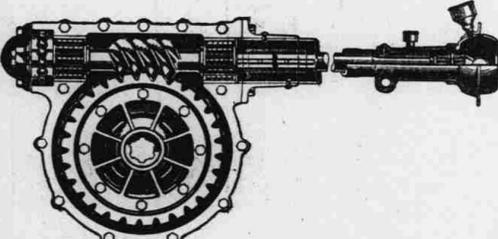
We will show you how to give it the chance.

THE WELDEX MFG. CO.
Cor. N. 12th and E Streets Phone 1494

CLYDESDALE MOTOR TRUCKS.



The Ford Model T 1-Ton Truck is now a little over three years old, and we have yet to hear of the first trouble it has given. That's because of the worm drive. Not a bit of the power of the motor is lost through the worm drive.



It simply cannot be. Up to the introduction of the Ford Motor Truck, you could only get the worm drive in the highest priced motor trucks. It is too expensive an equip-

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Complete List of Ford Truck Owners will be given Upon Request

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For Passenger Car or Truck

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We recharge and repair all makes of batteries. A service battery is at your disposal while yours receives attention. Inspection and filling service free.

Cheerful and prompt service, honest advice by experts, awaits you at our OFFICIAL PREST-O-LITE SERVICE STATION

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