

FRANCE TRYING SUBSTITUTE AS FUEL IN AUTOS

Mixture of Alcohol and Gasoline Reported to Have Proved Effective.

Consul Wesley Frost, at Marseilles, reports to the Department of Commerce that the French government is contemplating the enforced use of a motor fuel of a new mixture composed of alcohol, gasoline, cyclohexanol and phenol, partly in order to dispose of great accumulations of alcohol and partly to reduce the country's dependency for mineral oils on the United States, Great Britain and Holland. As a result of extensive experiments a "carburent national," as it is called, has been developed, the practical value of which is claimed to have been proven by tests. The formula is: Gasoline, 90; alcohol at 95 degrees, 10; cyclohexanol, 17.5; phenol, 37.5.

Various interests have been attempting to find an assured market for the alcohol distilled from sugar beets, surplus wines and vegetable products. The quantities of such alcohol produced in any year fluctuate, and the growers would like to be assured against over-production by an arrangement which would always enable them to convert their surplus into alcohol at remunerative prices. The solution which has been hit upon for disposing of the excess stocks of alcohol and providing a regular market for alcohol in the future is the enforced use of alcohol as an adulterant of gasoline.

The difficulties have hitherto been that the price of the alcohol has been somewhat higher than the price of gasoline, so that the resulting mixture would be somewhat more expensive than gaso-

Rules of the Road—Tokio.

(Posted in the Central Police Station)
1—At the rise of the hand of the policeman stop rapidly.
2—Do not pass him by or otherwise disregard him.
3—When a passenger of the foot hove in sight tootle the horn; trumpet at him meekly at 11:30, out if he still obstructs your passage tootle him with vigor and express by word of the mouth the warning "Hi Hi."
4—Beware the wandering horse that he shall not take fright as you pass him by. Do not explode an exhaust box at him. Go soothingly by.
5—Give space to the festive dog that shall sport in the roadway.
6—Avoid entanglement of dog with your wheel spokes.
7—Go soothingly on the grease mud as there lurks the speed demon.
8—Press the brake of the foot as you roll around the corner to save collapse and tie up.

Under the terms of the Beziers Concordat, the French government would establish a national alcohol office possessing a monopoly of the purchase and sale of alcohol, and this office would produce the carburent national. It would be subsidized by a tax of one franc per hectoliter on all wine marketed in France and of fifty centimes per hectoliter on all cider marketed. It is claimed that the resulting funds could be used to reduce the price of alcohol to such an extent that consumers of the new mixture would not suffer financially. It would thus appear that the wine and cider consumers of France would ultimately pay in the shape of a slightly increased price of wine for a subsidy which would keep the alcohol industry afloat, and would diminish by at least 10 per cent the French importations of gasoline.

Something to Remember.

Never park a car in the center of a highway, near a fire plug, at a street intersection, just around a curve or corner, on a hill, partly on the pavement, in a dark spot without lights, in front of a theater, on soft ground, nor near emergency entrances or exits of hospitals.

DRIVING POINTS GIVEN BY AGENT OF CLEVELANDS

Warrington Shows How Care Will Add to Pleasure and Reduce Danger.

"Care and caution are the watchwords of the thoughtful man at the wheel. They are his second nature. Not so much from fear of his own safety as from consideration of others, and, incidentally, for economical operation of his car, and for getting all possible service out of it," says C. H. Warrington, distributor for Cleveland and Chandler motor cars.

"For example, consider the matter of holding the steering wheel. The careful man takes a firm grip on it—palms up, the hands at each side at a point about a third of the way up from the bottom. The careless driver may be found with one hand or two hanging loosely at the bottom, palms down. At first palms up may seem uncomfortable, but the position will soon become the easier, as it is the safer and more secure.

Catching Gears Unnecessary.

"The careful and cautious driver starts his car with an even, quiet acceleration of his motor, dropping the clutch with a smooth, veer-like motion, shifting into the various gears without clashing, the change from low to high being accomplished in such a manner that the passengers in the car are hardly conscious of the change that has taken place.

Clashing Gears Unnecessary.

"It is not necessary to clash the gears, yet many drivers go through their whole motoring experience with a continuous clash; they drop in their clutch in such manner that their passengers are frequently tipped up on their necks, so to speak. And when these same drivers stop their cars, they usually grind their brakes and stop with a suddenness that nearly throws the passengers out of the car.

"Many motorists dread driving up and down hills. This is no more difficult to drive with careful and experienced driver than traveling on the level. It is only the inexperienced driver who insists on taking every hill on high. Usually he hits the top of the grade with motor laboring or knocking, to the ultimate damage or ruin of the car.

Gears are placed in an automobile for a purpose. It is always advisable to remember that one law of mechanics is, 'In order to gain speed you must sacrifice power, and in order to gain power you must sacrifice speed.' If a driver is approaching a hill he needs power. A lower gear provides this and should be used. Also it is easier to shift near the bottom of the grade.

Example of Carelessness.

"In descending a grade the careless driver will apply brakes, both foot and emergency. The careful driver shifts into a lower gear and brakes on the motor's compression; on a slight grade, second gear and on a steeper, low. In each instance, however, his foot brakes or emergency brakes are only auxiliary. "Driving rapidly over rough spots does not eliminate discomfort. What is more it is hard on tires. Bouncing up and down in the rear grinds the tread off the tires and is worse than skidding or sliding the tires under heavy brake pressure. Skidding on wet pavements may be overcome by careful driving. With a skid likely, the careful driver slows up, goes into lower gear and applies the brakes very gently. Disengaging the clutch and applying the brakes usually precipitates a skid that is quickly beyond control.

DEAR PEOPLE

By MIRIAM BATTISTA.

Dear People: When I came to Washington to appear "in person" at Mr. Loew's Columbia Theater this week I did not expect to have any moving pictures made, but when I found that some of your automobile representatives of your beautiful city had arranged to take me to interesting places here I asked that we make a movie of my "Little Journeys," so that I might have a reel of my very own to remember Washington by.

Mr. Beatus, who represents Mr. Loew here, said that he would help me make this little souvenir of Washington and so we started. First we arranged for the taking of the picture with the National Pictorial News and Mr. Crawford and Mr. Carter, who are real moving picture people, arranged to work with me. As I told you before, some of your automobile representatives began the whole business by very generously offering to take me about your city this week, and they did do it and I had a fine time.

Mr. Max Wiehle, of the Potomac Sales Company, took me to Walter Reed Hospital to meet and entertain the soldier boys, and I was so happy to be there, bringing smiles to faces that had seen so much suffering. Mr. Stafford, of the Red Cross, met me at the hospital with lots of the soldiers and the dear nurses who help them get well and strong. I couldn't stay long there because I was to meet Mr. Harding, our wonderful President. Well, Mr. Wiehle drove his fine Stephens car to the White House and, sure enough, I met Mr. Harding, who was very, very nice to me and I think he is a wonderful man. Then I saw Laddie Boy and had my picture taken with him.

Next day, Mr. Barry, of the Barry-Pate Motor Company, gave me a fine ride in a Chevrolet Sedan. I drove it myself a little way and had a wonderful time. We visited the Children's Hospital, and I did my best to entertain the little tots, there.

On Wednesday Mr. Joseph McReynolds gave me a ride in a big Studebaker all around and that day we visited St. Joseph's Orphanage. I did have fun with the boys there. One little boy had lots and lots of freckles and I had a picture made with him. He was shy and made faces, but you will like the picture I am sure.

Friday Mr. Emerson, of the Emerson & Orme Company, let me ride in a new Buick, and I went to the Capitol, where the Senate pages met me and posed for a picture with me. Pretty soon I met the Vice President, Mr. Coolidge, who was very nice to me and we were photographed together. I forgot to tell you that on all these wonderful rides Mr. Carter and Mr. Crawford were making a movie of me, and just to let you see what a happy time I had I am letting Mr. Beatus keep my very own reel at the Columbia Theater and show it to you all next week, beginning tomorrow.

Highways Will Be Safer

"It is reasonable to believe that highways will have a better safety record in 1922, because the public is increasingly awake to the fact that individual transportation brings individual responsibility.

"Massachusetts halved its accident record in one year. "Twenty-eight cities reduced their motor fatalities in 1921. "Cities are protecting the dangerous traffic spots. "The railroads are conducting an excellent and constructive 'Crossings Cautiously' campaign. "More playgrounds are being developed. "The public is laughing the 'auto-boob' out of existence. "Local, State, and national educators are training children in proper conduct on the highways. "The safety season is now on."

Especially is this true if the brakes are not properly equalized.

"The Cleveland Six is equipped with a transmission brake. In skidding, this transmission brake, when applied very gently and progressively, produces surprising results, especially when coming out of a skid.

To Avoid a Collision.

If a car should suddenly drive across the path of your car, or if a car ahead should turn to the left as you were starting to pass it, turn your car quickly in the same direction taken by the other car, at the same time slowing your car's speed. If an attempt were made to bring your car to a stop without turning, the probability is that you could not stop in time to avoid a collision.

The Battery and Its Care.

Self-starting and electric lighting systems require efficient batteries. For this reason the battery should receive careful attention. It should be inspected frequently and the plates of the cells kept covered with electrolyte. A little distilled water added at frequent intervals may obviate the necessity of a new battery.

Tire Logic.

Tires should be neither under-inflated nor over-inflated. If too soft, they will heat up and wear out quickly. If they are too hard, they make harder riding and require more gasoline consumption, because the soft tire wraps itself around an obstacle, whereas a hard tire does not yield, but must be pushed over the obstruction.

Always stop if some unusual noise develops in the car. By doing so serious damage may be prevented.

Avoid letting an automobile stand in the sun in hot weather because of the tires. Choose a shaded spot if possible.

The gasoline level in the carburetor varies from an eighth to a sixteenth of an inch below the top level of the spray nozzle.

When soldering the battery connections, always use pure lead, as tin compositions will corrode.

Obey the manufacturer's rules as to lubrication; he knows more about the car than you do.

To avoid breaking spark plugs, use a wrench that bears on all six sides.

NEW MODEL OF DAVIS CAR HAS QUALITY UNITS

Same Fundamental Ideas Are Employed as in Larger Types.

In the new Davis model 71, light six, the same fundamental units are employed as in the larger Davis models. The new car has a wheelbase of 114 inches and supplies the need for a six-cylinder car in a class which, up to a short time ago, has been confined to four-cylinder models. In the new Davis the engine is the newly designed Continental model 6Y, the clutch is a Borg & Beck dry plate, the transmission is a Warner, and the axles Timken. Tires are 31x4 cords on Dimeel wheels, one spare wheel being supplied.

The body work is exceptionally good. The upholstery is of real leather, and an excellent job of curstaining has been done. The curtains and top are individually fitted to each car.

The five-passenger touring complete weighs 2,650 pounds. Due to the engine characteristic the car is capable of exceptional performance. Its maximum speed is well beyond 70 and it is surprisingly good in accelerating, showing five to thirty miles per hour in 11.3-5 seconds and from ten to thirty miles per hour in 9.5-5 seconds. The engine peaks at 2,600 revolutions per minute, at which it develops over fifty horsepower. This is a wide-range engine, which operates very smoothly, due to the use of a well-balanced four-bearing crankshaft, a stiff crankcase and well-balanced reciprocating parts.

The engine is block cast and has a bore and stroke of 3 1/4 by 4 1/4 inches. Lubrication is by force feed through a drilled crankshaft to the bearings, the cylinders being oiled by spray. There is a separate lead to the timing case. The engine front end uses a silent chain which is readily adjustable for slack from the outside of the housing. Cooling is by pump, that unit being mounted against the rear of the cylinder block and connecting by means of a short hose to the water jacket flange. The pump drive is through an extension of the Delco generator, as shown in the engine view on this page. The Delco unit, it will be noticed, has the cut-out on top and the ignition unit, also Delco, takes its drive from the generator shaft.

The fuel feed is from the fifteen-gallon main tank to a Stewart tank, through a Stromberg carburetor to a newly-designed intake which is hot-spotted by contact with the exhaust. The basis of this combination manifold is employed in other models of Continental and has proved very satisfactory in vaporizing gasoline globules that get into the mixture stream.

A standard form of Borg & Beck clutch is used. The transmission follows past Warner practice. For the drive to the Timken axle, Davis employs two Peters universals. These joints are the latest development of this well-known manufacturer of joints.

Steering is accomplished through a standard design of worm and sector. The spark and throttle levers are in the usual positions, the former operating the ignition unit through connecting linkage extending forward and across the front of the engine. The frame is six-inch side rails.

which are provided with stout cross members well braced and gusseted. The rear cross member is ten inches wide. Rear springs which have to transmit the driving effort and absorb rear axle torque are fifty-two by two and lie flat under load. Front springs are thirty-five by two inches.

Fire! Examine the exhaust pipe. If it comes near anything inflammable, it should be covered with asbestos. Faulty carburetion will sometimes overheat the engine and raise the temperature of the exhaust pipe to such a degree that it may cause fire.

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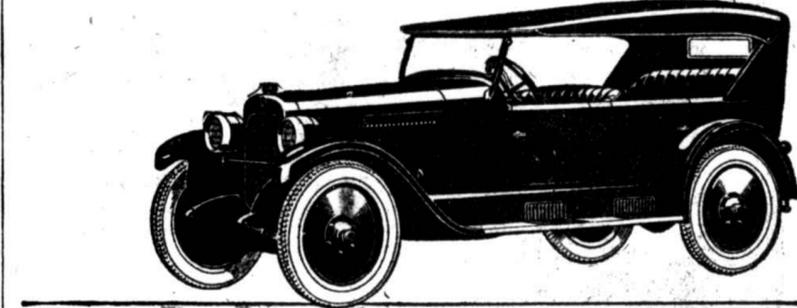


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