

HAWAII BOASTS GOOD SUBSTITUTE FOR MOTOR FUEL

Product Comes From Molasses and Is Inexpensive to Manufacture and Effective.

Motorists in the Hawaiian Islands are not worrying these days about any actual or impending shortage of gasoline, according to Frank E. Carroll, manager of the California district for the Goodyear Tire & Rubber company of California, who has just returned from the islands, after a month's business trip.

"A substitute for gasoline is now being produced there," he says, "which, within the next three months, will reach a production sufficient to take care of all the cars on all of the islands if a gasoline shortage should develop.

"The new fuel is known as 'motor alcohol' and is the invention of J. P. Foster, a chemist on one of the big sugar plantations on the island of Maui. It is now being used in many cars and the results obtained are said to be in many ways superior to those achieved with gasoline. More power, greater mileage, easier starting and freedom from carbon are among the benefits it is said to produce. It can also be used without any readjustment of carburetor.

"The motor alcohol that has been made so far has been produced from molasses, of which there are 1,500,000 tons available, enough to produce 6,000,000 gallons of motor alcohol. The molasses is a by-product of the sugar industry of the island, and contains, in addition to fermentable material, other products of value, such as potash, nitrogen and phosphoric acid. The value of these, after recovery from the fermentation, is greater than the value of the original molasses, so that in calculating costs of the fermentation process for alcohol production, the raw material charge is practically nothing.

IMPORTANT CONSIDERABLE

"The importance of developing this industry is very considerable, as it will provide a cheap and readily available motor fuel, releasing both petroleum fuel and shipping space. The motor alcohol made according to the new formula is performing perfectly in marine, stationary, automobile, truck and tractor gasoline engines. In a 26 hour test made with a 75 horsepower tractor, the motor alcohol consumption was four gallons per hour as compared with four and one half gallons of gasoline on similar work. With the motor alcohol the speed was higher and the power greater. The cylinders were afterward opened and examined and the old carbon deposit was found to be entirely removed. The carbon remaining was so soft that it could be picked off with the fingers.

PROFITABLE INDUSTRY

"Plantations which have been letting their molasses run to waste or burning it for the potash recovery are now finding the manufacture of motor alcohol a profitable undertaking.

"Business conditions in the islands were never better than they are right at the present time. This is due largely to the high bonuses paid to the workers and the stock dividends paid by the various sugar companies. The crop of the past year, the value of the sugar crop has rarely exceeded \$70,000,000. This year, however, it is thought the crop's value will run about \$80,000,000.

"A great many automobiles are being purchased by the Orientals. One automobile dealer in Honolulu sent out six salesmen with six second hand cars on Decoration day, which was pay day for the workers, and sold five of them.

"The demand for automobiles is much greater than the supply and practically no new cars are available. And the tire situation is similar—the demand cannot be satisfied.

LARGE CROWD IS PRESENT AT OPENING



A portion of the crowd that attended the opening ceremony at the new building of the Mitchell, Lewis & Staver company, at Broadway and Everett street last Thursday evening.

PARADE'S SUCCESS IS DUE TO SMITH

Credit Due Salesman for Putting Over Pageant in Spite of Difficulties.

Frank V. Smith, salesman for the Howard Auto company, local Buick distributor, carried on his shoulders the burden of making the Rose Festival decorated vehicle parade this year the success that it turned out to be. Smith was grand marshal of the parade, as well as secretary of the Rose society.

Although discouraged at the start by the amount of rain that fell during the parade, Smith nevertheless finished off his job of getting the great parade underway under probably the most disadvantageous conditions ever faced by the Rose Festival committee.

Smith's participation in the parade this year was largely a result of his work last year in putting his part of the celebration over for the city and the final success of the undertaking, in the opinion of people generally, was largely due to his efforts.

No Automobiles for Asylum Bath Lover

Providence, R. I., June 26.—(I. N. S.)—Anthony Baden Durfee spent his days living in a bathtub. So they put him in Butler asylum. They kept him there 48 years. Now they have released him, the court finding that Anthony was not insane at all. Durfee is 75 years old. He left his bathtub to talk to a reporter. "You will have to excuse me," said he politely, "I am just from the bath. I am tired of living in an asylum. Forty-five years is enough, don't you think? I don't know where I shall live yet, but shall let my relatives help me choose a place." Attorney Edward J. Noon, who fought the case against Durfee, says he has no objection to the patient's freedom, so long as his property is properly administered. Attendants at the asylum say that besides his obsession for cleanliness, the patient has other pronounced tastes. He abhors automobiles and will walk miles rather than ride in a motor or electric car.

Cape Town Street On Occasion Shows Worst Congestion

A much-traveled contributor to the Wall Street Journal, familiar with the great capitals of the world—not from the tourist point of view, but from earning a living in them—once shed an interesting light on the traffic problem in congested city streets. There had been the usual discussion about the traffic density in relatively slow moving Philadelphia, constricted Pittsburgh, reckless Chicago, rapid Fifth avenue in New York, and, that miracle of them all, the successful handling of traffic from eight simultaneous directions at the Mansion House corner in London.

But, to the surprise of his readers, this authority said that Adderley street, Cape Town, could on occasion provide the most picturesque and profane jam of traffic a policeman ever had to disentangle. Merely the main street of a city of 100,000 people, there is yet one

occasion when its traffic becomes tied up. This is when a self-willed Boer wagon driver introduces eight span of oxen, only a little less obstinate, and stupid than himself, into the main artery of the city.

The Boer's trek-wagon is nearly as long as a freight car, and the 16 oxen in pairs take up about the length of two more cars. This form of transport cannot turn around, or move at a faster pace than a slow walk. Everything else must give way until it is headed in a safe direction. To call the Boer a conservative is gross flattery. The conception he holds of his rights in the public streets dates back 2½ centuries, like the plain bar yokes on his oxen, and a parliament largely composed of men like him backs his liberty to make a nuisance of himself.

Setting the Nut
Castellated nuts have a way of tightening up between notches. If the nut is screwed up to the notch ahead it is too tight, while the notch back is too loose. This trouble can be cured by a careful filing of the face of the nut so that it can be screwed to the notch ahead.

FLEET OPERATION OF TRUCKS FOUND MORE ECONOMICAL

Shippers Learn That Saving Follows When Mechanics Are Run Collectively and as a Whole.

The term "fleet" has now become an acceptable and appropriate term in truck operation. It denotes organization and a coordinate working of each unit composing the whole along a plan that insures the ready handling of the group of trucks. Many shippers are now running their trucks in fleets, finding their operation en masse, as it were, more economical than having single trucks running on some fixed schedule.

The term fleet is used not only when the trucks are actually on the road, but the man who operates a string of trucks and may run his carriers in separate units used the term "fleet" to indicate the number of trucks in his possession. The underlying factor that allows the use of the "fleet" idea is organization. Organization is just as essential to the efficient operation of a group of trucks as it is to any other phase of business activity. Only by means of an organization can a fleet owner or manager direct the operation of his trucks intelligently and economically.

The personnel of a fleet organization is divided into two groups, one of which is the maintenance division and the other the operating division. In some of the larger fleet organizations an inspection division has separate identity, but in the smaller ones this inspection service is directed by the maintenance division or is performed by the truck manufacturer himself.

The maintenance division should be headed by a superintendent who is a practical mechanic. He may have as many assistant mechanics as is necessary to maintain the fleet in good mechanical condition. Washers and greasers are included in his department and work according to a well-planned schedule.

Naughty Pajama Parties Must Go

Boston, June 26.—(I. N. S.)—Bare knees and one-piece bathing suits are a thing of the past at Hull and Nantasket. Chief of Police Reynolds has decreed that infractions of this rule will be dealt with severely and Hull police who have hitherto closed their eyes when some dimpled-knee miss passed, will be obliged to act as an escort—as far as the police station. Midnight "pajama parties" and other nocturnal disturbances of which suburban residents have complained will also be vigorously suppressed.

FIGURES INDICATE AUTOMOTIVE GAINS

Remarkable Strides Are Seen in Motor Truck Industry of the United States.

Production figures over a period of years, as compiled by the National Automobile Chamber of Commerce, show the giant strides the motor truck industry is taking, and that its advance was greatly accelerated last year. The figures follow:

Year	Number	Wholesale Value
1914	411	\$46,647
1915	10,650	\$2,082,821
1916	128,137	\$20,982,968
1917	187,251	\$48,168,992
1918	265,142	\$69,811,925

Average wholesale price for 1919—\$262. At the beginning of 1919 the entire automotive industry was on practically a 100 per cent war basis. Due to this fact passenger car production was slightly less in 1917, although greater than in 1918. But manufacturers of motor trucks were able to overcome this handicap of the early months and make possible a substantial increase for their product over all previous records.

Nevertheless, during the 12 months demand stepped ahead of production, its rapid advance having resulted in large part from the publicity given the wartime performance of these vehicles and from the accumulative power of demonstrations made by the truck itself in commerce.

Every Tire Signed

We insist that Millers must be uniform. Each tire is signed. A record is kept of the maker, the inspector and the process.

If a tire comes back for adjustment we learn the reason. If the workman is at fault he is penalized. If the inspector overlooked a flaw he is held responsible. If any process or material is at fault, we correct it.

After years of this checking we've attained uniform tires. There are whole large cities from which not a Miller Tire came back last year.

Treads Must Endure

Miller Treads, by our standard, must outwear the balance of the tire.

We have attained a tread which outwears rivals by 25 per cent.

Every day our tread stock is vulcanized, then tested, in our laboratory. We permit no variation.

Not a single Miller Tire with these new-grade treads has ever come back with the tread gone.

Not 20,000 Miles

Countless reports come to us on Miller Cord Tires showing 20,000 to 28,000 miles of service. And tales of that kind are told everywhere, we learn.

But mileage depends on conditions—on size, care, load and road. Millers are uniform, but they are not used under uniform conditions.

In our factory tests we average 15,000 miles on Cords.

But a Miller Tire will outlast—almost always—any tire that you place opposite, no matter what it costs. Compare them under like conditions, and see what mileage modern tires can give.

You will gain a new criterion. When you buy a new car insist on Miller Tires. Twenty car makers now supply them and there is no extra charge.

THE MILLER RUBBER CO., Akron, Ohio

Miller Tires

Winners in Million-Mile Test

Cords or Fabrics

Geared-to-the-Road
Registered U. S. Patent Office

NORTHWEST AUTO CO.

Distributors

ALDER AT EIGHTEENTH



Tire Prices

Some False Ideas About Them

Should an extra price buy an extra grade tire?

It should not. Any first-grade tire should be built as well as a tire of that type can be built.

Cord Tires cost more than Fabrics, and are worth the extra price. Men who figure cost per mile are coming to Cord Tires.

But any tire, Cord or Fabric, should be built for the utmost service which that type can give.

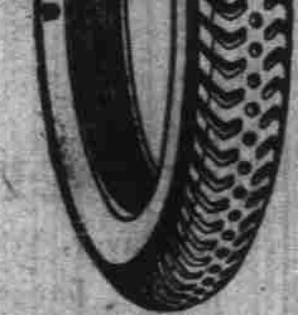
Some Men Over-Pay

Some men pay extra prices, expecting extra mileage. Some pay under prices for an under-grade, and hope to save in that way.

Both are wrong. There may be exceptions—there are always freak tires. But countless tests have proved that Miller Tires at Miller prices, on the average, give the lowest cost per mile.

And Miller Tires, both Cord and Fabric, cost about the standard price.

TreadPatented
Center tread smooth with union cap, for firm hold on wet asphalt.
Geared-to-the-road side tread mesh like cogs in dirt.



Here we constantly compare the best other tires with Millers. Also in ceaseless road tests. Thus, day by day and week by week, we are guarding the Miller supremacy.

The Eldorado Stage Co. of Los Angeles tested 21 other makes against Millers on 12-passenger Packard Buick, weighing 6,600 pounds loaded. In this supreme test Millers won by long odds, on long-distance uniformity.

GRANT TRUCK

One and a Half and Two Ton

A Few Outstanding Points
Worth Your Consideration:

- Electric lighted and started
- Torbenen internal gear-driven axle
- Continental motor
- Jacox steering gear
- High-tension magneto
- Remy two-unit starting and lighting system and other features equally as important in a good truck.

One and a Half Ton \$1885
Two Ton \$2150
F. O. B. Cleveland, Ohio

Terms: One-third down

Some Territory Open to Dealers

Manley Auto Co.

Eleventh and Oak at Burnside
Broadway 217

PERFORMANCE COUNTS

Features You Get Exclusively in MACK Trucks

Easy Steering Big Trucks

Ask any experienced driver of heavy duty trucks to name the easiest truck to handle and we are sure he will say it is the MACK.

The steering is laid out for accuracy and is unaffected by spring action. MACK drivers never swear at their truck and say it is a man-killing job to drive one all day long. In fact, they will tell you that it is no more tiresome to drive a MACK truck than it is a passenger car.

Strength and safety are pre-eminent in the MACK truck steering gear. Comfort and accuracy are the next considerations. The four factors in combination are not to be had in any other make of motor truck.

The steering tie-rod is in front of the axle on MACK trucks, instead of in the rear, and this adds to its effectiveness. There is considerable rake to the MACK steering column and this adds to the ease of control.

Next: Braking System on AC models.

MACK-INTERNATIONAL MOTOR TRUCK CORP.

Tenth and Davis Streets
Broadway 691

FEDERAL

Double Cable Base Tires

Move With the Rim

FEDERAL Tires cannot slip or chafe upon their rims.

The Double-Cable-Base, an exclusive Federal feature, accomplishes this new security of tire to rim and positively prevents rim cuts, blow outs just above the rim, tube pinching and all forms of rim-damage.

All Federals—"Traffik," "Rugged" and "Cord"—have these exclusive long-wear advantages.

See us today and begin saving.

The Federal Rubber Company
of Illinois
Piquette, Cadillac, Wisconsin

DEALERS—Write for exclusive proposition if FEDERAL Tires are not sold in your town.

WEAVER TIRE COMPANY

Oregon Vulcanizing Co.

222-224 Burnside Street, at Broadway
Telephone Broadway 579