

Barber runs his experimental car on a mix of 6% acetylene gas and 94% air.

PRELIMINARY TESTS "LOOK PROMISING"

This Car Runs On Acetylene Gas

Lee Barber, a Massachusetts welder for 30 years, has converted an old car to run on carbide gas from a generator he placed in the trunk. Special precautions were taken to keep water from splashing into the carbide which could cause uncontrolled production of excess gas. An anti-backfire valve was also added to prevent accidental (and disastrous) flashbacks from reaching the gas generator. A modified propane carburetor was installed, in addition to the original carburetor, to provide dual-fuel capability for initial testing and operation.

Many oldtimers will recall the car-

bide gas generators used years ago to provide lights in homes, schools, businesses and other places. Carbide gas, made by adding water to a mixture of calcium carbide (a product of limestone and coal) still provides light in some remote locations, such as mines, where electric power is unavailable. Carbide gas is commonly referred to as acetylene gas.

Barber says he started out looking for a practical substitute fuel that was not a petroleum based product, as in propane. Acetylene appeared to be ideal because, as he points out, the raw materials — limestone and coal — are abundantly available in this

country. In his area, the going commercial price in 100 lb. quantities is right at 20 cents/lb.

After studying tests and reports on other acetylene gas applications, Barber first sought a fuel-air mixture of mostly acetylene. However, he's now on his fifth-generation fueling system and is using a ratio of about 6% acetylene gas to 94% air. Barber doesn't have precise figures yet but is satisfied that fuel cost per mile with acetylene is much lower than it would be for gasoline.

Barber says he has a great deal more work to do on acetylene power to make it practical. This is a spare time project which he works on when time and money are available. Nonetheless, he has done enough testing and driving to know that the concept will work: "There is no apparent difference in engine acceleration and power when burning acetylene compared to using gasoline."

Emission tests conducted on his experimental car at the Springfield

Vocational Center, Springfield, Vt., showed 0.6% hydrocarbons and 0.1% carbon monoxide when the engine was idling at 600 rpm.

Barber would like to obtain financial backing for additional testing and development of the system, which he calls Ace Car-Go, and get it ready for production. However, he presently has no plans to make and sell conversion kits for current autos.

At the moment, there is a legal controversy clouding future activity on his idea. Rexarc, Inc., makers of acetylene generators and related equipment, is attempting to block Barber's work on the grounds that his plans for acetylene powered automobiles are unsafe. Barber, however, remains undaunted and says he plans to continue his own experimenting.

He cautions interested persons that acetylene gas is very flammable and that anyone working with it must know what they are doing and handle the material properly. He notes that acetylene gas generated in the system he's using in his car has much lower pressure than does the gas stored in tanks and used in welding.

Barber is willing to answer questions and share test data he has accumulated so far for his acetylene car. However, he asks that anyone wanting information please send a large business-sized, stamped, self-addressed envelope and \$2 to help offset the cost of printing, and his time spent answering questions.

For more information, contact: FARM SHOW Followup, Lee Barber, Ace Car-Go, Boyle Rd., Gill, Mass. 01376 (ph 413 863-9086).

KEEPS ANIMALS OUT

Hinge-Gate Guard For Tile, Culverts

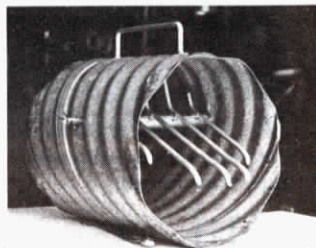
Having trouble with animals getting into your tile outlet pipes or road culverts? Miles Animal Guards of Barrett, Minn., may have the answer to your problem.

They've introduced a new type of "hinge-gate" animal guard that installs in any steel or plastic pipes or culverts from 4 in. to 24 in. in dia. (The guards can't be used with aluminum culverts since they're made of welded steel and would develop electrolysis with the aluminum.)

The guard features an exclusive bent-top design which prevents the animal from crawling over the top no matter what the angle of the lower guard.

Installation is simple. Punch or drill two holes in the outlet pipe or culvert. Next, insert the steel rod through one side of the pipe or culvert, through the animal guard and through the other side of the pipe or culvert. Replace the cotter pin on the rod to hold it into place.

The hinge is designed to be very



Bent-top design prevents animals from crawling over top of guard.

loose. This prevents it from filling with debris and sticking. Points are sharpened on the downside to prevent animals from attempting to lift the guard and crawl under.

Prices range from \$5.50 for a 4 in. guard up to \$28.95 for a 24 in. guard. Dealer inquiries welcome.

For more information, contact: FARM SHOW Followup, Robert Miles, Miles Animal Guards, Barrett, Minn. 56311 (ph 218 685-4023).

OPERATES OFF YOUR AIR COMPRESSOR

"Thunder Gun" Washer Cleans With Velocity

Here's a new power washer that uses plain water and force from your air compressor to clean with velocity rather than high pressure.

You can use the new Thunder Gun with cold or hot water (up to 140°F), and a number of liquid detergents and cleaners, for a wide variety of farm cleaning chores.

Your air compressor must be rated at a minimum of 5.3 cfm at 90 psi in continuous operation. A standard 5/8 in. garden hose supplies water to the Thunder Gun where it is metered into the airstream. Water travels out a machined brass nozzle at velocities up to 365 mph.

Besides cleaning, the Thunder Gun can apply fertilizers, herbicides and pesticides, disinfect, sanitize and wax.

Company engineers estimate you can buy a Thunder Gun and an air compressor for "about half the money



Thundergun hooks to standard garden hose and air compressor.

a good high pressure washer will cost." The gun alone sells for \$99.

For more information, contact: FARM SHOW Followup, Briar Industries, Box 55, Gardner, Kan. 66030 (ph 913 884-8559).