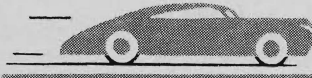


WATER IN A GAS TANK can be gauged accurately and instantly with the aid of a new chemical paste that is simply spread on the measuring stick and turns from gray to red on contact with water. The paste is not injurious to the hands and may be applied quickly with a finger when the presence of water is suspected in tanks such as those in use at airports, marine terminals, bulk plants, and service stations. Water at the bottom of the tank changes the color of the chemical, leaving a clean, sharp line at the gas-water dividing level.

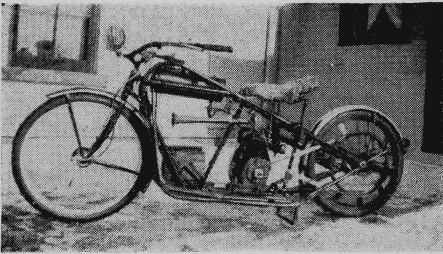
The paste is not subject to evaporation and may be kept indefinitely, a 2½-oz. jar being enough for about 500 tests. It is also not affected by gasoline, and that left untouched by water may be scraped off the gauge and returned to the jar for reuse.

AUTO Ideas



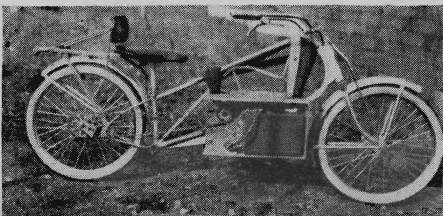
LIGHT TIRES ON THIS TRAILER and wood instead of steel construction save critical materials in the transportation of war-plant and other workers. The trailer mounts eight tires of the new Victory type that use but a few ounces of crude rubber compared to the 60 percent of crude required for heavy bus tires. The trailer seats 24 persons, and the converted sedan pulling it carries 15 more.

How Ingenious Readers Solve Their Gasoline Problems



BICYCLE WHEELS mounted on a frame of thin-wall conduit and powered by a 2½-hp. motorcycle engine form the basis of this motor bike built by Edward Stuebe, of Watertown, Wis. The machine can do 35 miles per hour.

AN ELECTRIC BIKE may be made from a bicycle by installing two storage batteries to power an old 12-volt Dodge starter-generator. With a sprocket ratio of 1 to 3, Walter V. Evans, of Buffalo, N. Y., gets over 50 miles per charge.



RIDING TANDEM on a homemade motor scooter that boasts between 60 and 70 miles to the gallon of gasoline and can make 40 miles per hour does the trick for Harold G. Via, of Waynesboro, Va. Eight months of spare-time work with parts from such things as wheelbarrows, bicycles, automobiles, motorcycles, and electrical equipment brought the machine into being.

Wheels and tires were taken from two pneumatic-tired wheelbarrows. The engine is a 3-hp., four-cycle type from an old motorcycle, from which a three-speed transmission also came. Equipment includes hand-grip control levers, an electric starter, head, tail, and stop lights, and an instrument panel.

