Hercules Engine News

Including Economy, ARCO, Jaeger & Thermoil

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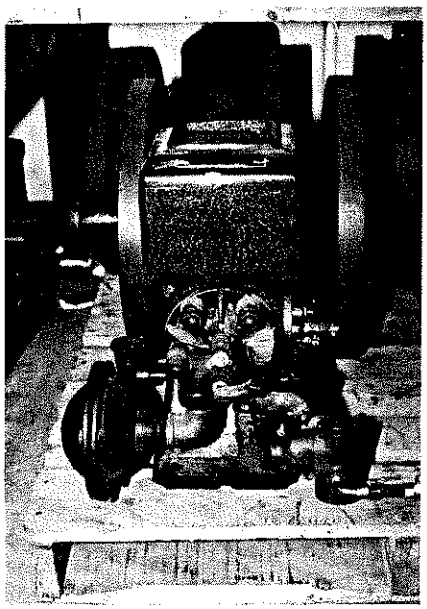
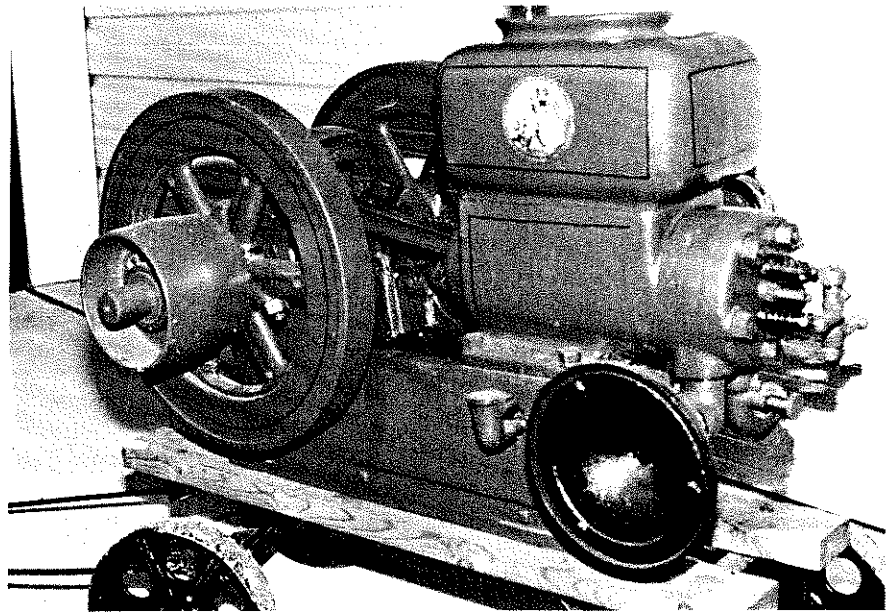
For an engine producer that was noted for somewhat standardized, simple common hit and miss engines, Hercules produced a lot of variations, special features and brands that are seldom seen. Again, during the first half of the E model era (1914-17), there are interesting developments.

There was a special fuel mixer designed to allow the hit and miss engines to burn natural gas, artificial gas (LP) and gasoline. Shown here (below) is a 1½ HP Economy engine so equipped. The standard fuel valve allowed the engine to be started on gasoline as usual. Once the engine was started, the gas valve could be turned on and the gasoline valve turned off. The gas was fed in under low pressure (1 or 2 pounds per square inch) behind a small poppet valve heavy enough to shut off gas flow until the intake stroke of the engine. It then was raised up by the intake vacuum and a charge of air and gas was drawn in through the special gas mixer and into the cylinder.





Sears catalogs show engines of this design for several years and list them as being available in all sizes. It is likely that these engines were used in areas where natural gas was available and where the engine was permanently installed. No instructions or parts literature for these special equipped engines has turned up so far.

The Hercules throttling governed engine (model EK) was introduced in 1915. Along with its development, Hercules must have solicited business from jobbers and industrial suppliers. During this time there was a proliferation of engines using the Hercules design and marketed under what are now rather obscure brands. Many of these were of the throttling governed type. The brands known are: Champion, Rohaco, Reeco, American, Williams, Phillips, Enen, Saxon, Atlas Mixer, Loane, Ajax, Keystone.

There are likely more. Some engines left the Hercules factory with these brands on them and others were rebranded somewhere in the marketing channels.

Another somewhat obscure feature also shows up. A few engines (Hercules and other brands) are equipped with smaller diameter, heavier built flywheels. Shown here (above) is a three HP Hercules so equipped. It came off of a concrete mixer. It also has a longer crankshaft on the pulley side. Regardless of engine size, the design of these special flywheels is the same. It is likely that these smaller diameter wheels were an option when the engine was to be used in a somewhat restricted space. Interestingly, these special flywheels never show up in any of the catalogs, instruction, or parts books. O