

Hercules Engine News

By Glenn Karch

Hvid History



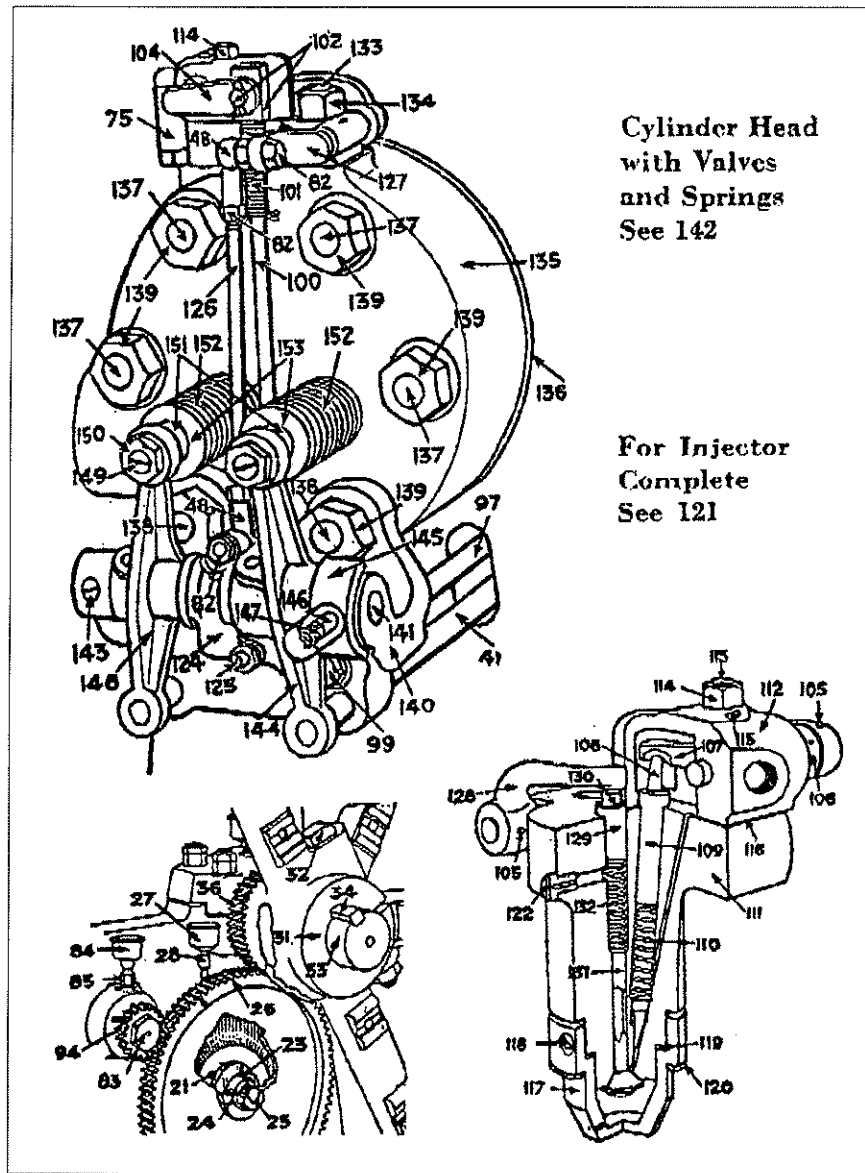
If you don't know how it's supposed to be pronounced, the name "Hvid" is a bit of a mouthful. A Danish name, it is simply pronounced "veed." Rasmus Martin Hvid was the man behind the name, and he held three of the five patents related to the fuel system used on the Thermoil brand engines and their many look-alikes.

Several years ago someone sent to me a copy of an advertisement for Penmac engines. The ad was from Melchior, Armstrong & Dessau, New York, N.Y., the exclusive foreign distributors for the Penmac engines, and the engine illustrated looked identical to the 6 HP and 8 HP Hercules-built Model U Thermoils.

Just recently an inquiry came from Wayne Butler in New Zealand concerning a Penmac engine he has. After several e-mails, it has been determined Wayne's Penmac is a 3 HP engine produced by the Ker & Goodwin Machinery Company Ltd. of Brantford, Ontario Canada. The tag on Wayne's engine reads; "Petroleum Engine & Manufacturing Co. of New York." If you read carefully, you can see where the Penmac name came from.

In addition to the three patents held by Hvid, there were two other patents relative to the fuel system used on the Thermoils and their look-alikes. Jan Brons and Nanno Timmer of the Netherlands held the first of these two patents for a "Hydrocarbon Engine." It was applied for July 3, 1904 and awarded Oct. 22, 1907. Jan Brons held the second patent, which was applied for on April 13, 1907 and awarded on May 18, 1909.

On Feb. 2, 1912, Rasmus M. Hvid applied for the first of his patents for an "Oil Injection Device for Oil Engines." It was



Cylinder Head with Valves and Springs See 142

For Injector Complete See 121

The illustration at left, showing details of a Hvid engine's cylinder head, timing gears and injector, appears to have been used by various companies that produced the Hvid design of compression-ignition engines. Since most companies were using identical mechanical features, it's presumed they simply opted to take advantage of an available illustration. It's believed this illustration originated with Hercules Gas Engine Co., as it was the first in the U.S. to produce the Hvid engine design.

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awarded on April 6, 1915. The patent for "Means for Delivering Oil to Oil Burning Engines" was filed Aug. 16, 1912 and awarded April 6, 1915. The patent for "Hydrocarbon Engine Governor" was filed on Dec. 16, 1913 and awarded on Dec. 28, 1915. Interestingly, the Sears catalogs note that the first Thermoil engines were built by Hercules in October 1915, before this last patent was issued.

Just recently I received a complementary copy of the book *Patent Brons - One Hundred Years Vaporizing Engines* by Jan Vegter of the Netherlands. It is a rather comprehensive book on Brons, Timmer and Hvid, their patents

and the engines built using those patents. It includes many illustrations of European-built engines and their applications as well as those built in the U.S. The illustrations include English language captions, but most of the text is in Dutch.

In the U.S. and Canada, there were many brands of look alike engines that fell under the above-mentioned patents. These include Thermoil, Hercules, Johnny, Victory, Brantford, Burnoil, Dynoil, Parmaco, Boos, St. Marys, Cummins, Renfrew, Hoag and probably others. Besides these "look-alikes," an Evinrude, several Cummins and other vertical engines using this type of fuel system were built. An

interesting thing about all of these engines is the literature that accompanied them, for the text and illustrations are amazingly similar. From what I can determine, Hercules Gas Engine Co. of Evansville, Ind., was the first to produce Hvid engines in this part of the world. It must have been people related to that company that first wrote the text and supplied the illustrations for the manuals. Included here are illustrations that are common to the various manuals.

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