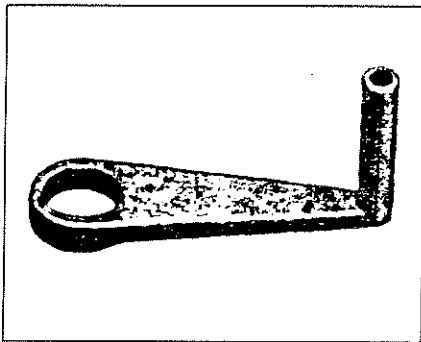


The Hercules Engine News

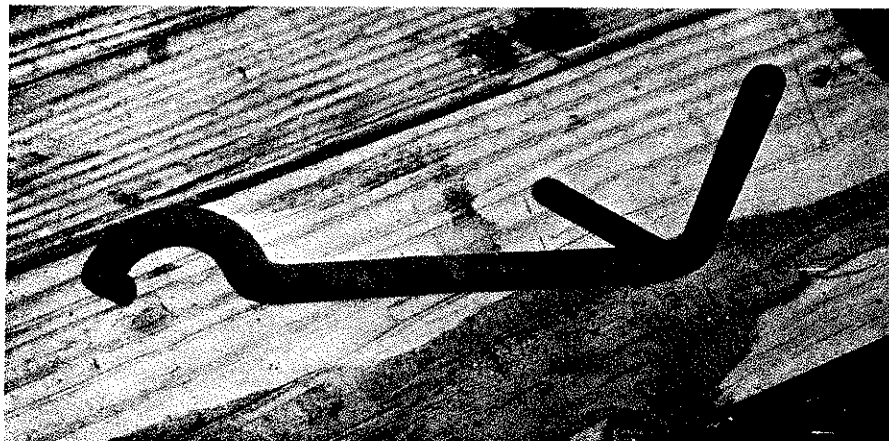
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This story is all about Hercules/Economy gas engine hand cranks. All three smaller sizes of these engines were always equipped with a hand starting crank. You may recall that in the June 2001 issue of GEM there was an article about cranking gas engines with a lot of pro and con comments in regard to using hand cranks from the Stationary Engine List folks.

There were at least four different hand starting crank designs used during the Hercules/Economy engine era. The first, dating back to the Sparta Economy engines, was also used in 1914 and '15. It was of one piece cast iron design with a narrow sleeve that fit over the very short end of the crankshaft with an incline and a notch to engage the end



#1



#2

of the flywheel key. This crank, although seldom seen, is shown as illustration #1.

Another rather simple crank also made its appearance early in the era. It is shown as illustration #2. It is a one piece, rather lightweight forging, with the engaging hook on the outer end. It too, is seldom seen.

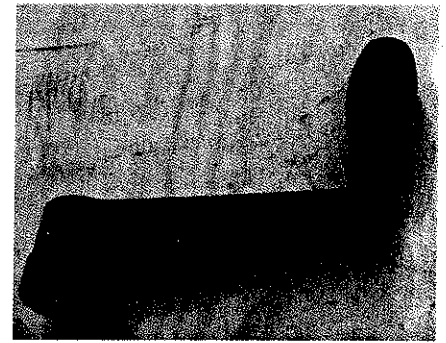
The most common crank is shown in illustration #3. It is a two-piece cast iron crank with a pin for the hand grip to turn on. It was the crank during the E, F, G and H model eras. It, too, was



#3

designed for use where the crankshaft only extended out past the flywheel about 1½ inches.

With the advent of the S model and later engines, the crankshaft extended out at least another inch, so a sleeve type crank could be used. This allowed the engaging notch to slip away from the key and still remain on the end of the crankshaft when the engine started. You can see it as illustration #4.



#4

Some comments about these cranks are in order. When the engine was new, the crankshaft key was square and sharp. Likewise, when the hand crank was new, the engaging notch was square and sharp. After many hours of cranking, both the crankshaft key and the hand crank engaging notch become worn and somewhat tapered. This would then allow the hand crank to creep or slide off the crankshaft key. A little oil or grease on the engaging surfaces made it worse. I have never used the #1 crank. The #2 crank, being rather light, didn't cause much bodily injury if it slipped off. It is my favorite of the bunch.

But watch out for #3. It is much heavier and, in my opinion, has a greater tendency to slip off. Not only is it heavier, the hand grip is free to rotate so the main part can easily be swinging rather freely in the air when it slips off. That is when body parts can easily get smacked. When this thing gets worn, a baseball catcher's mask and chest protector might be good equipment to have. ○