Of The "Home-Built" Tractors



Add-On Engine

Back in 1962, Jack McMillan, Pleasant Plains, Ill., needed more horsepower for the Oliver 80 he was using. He got it from a 20 hp air cooled Wisconsin engine, salvaged from a hay baler.

"It made a four 14 tractor out of a three 14." McMillan recalls.

"I was running the tractor about the time farmers started switching to dual wheels. I remember putting duals on the old Oliver and pulling a 12-ft. disk. The extra engine gave me enough to spin the wheels."

Oliver tractors of this vintage

had a front mounted cultivator that hung on pipes run through the tractor frame. McMillan made use of these pipe holes to provide for the mounting of his Wisconsin engine.

He installed two pipes for a frame, then made another frame for holding the engine. It was designed so the Wisconsin engine was mounted parallel with the Oliver engine, and so the pulleys of the two engines would line up. This hookup also eliminated the need for hand cranking the Wisconsin engine.

Siamese Tractor

Billy Watkins, Moultrie County, Ill., didn't know it at the time, but the spin-off effects of his building this Siamese tractor led to the popular weight transfer sled used at tractor pulls all around the country, and also to a Federal landmark decision of the U.S. Patent Office.

This photo of Watkins' tractor, from the C. F. Marley Photo Collection, is just about all that is left of the home-made Siamese tractor. It was another example of "necessity" being the "mother of invention."

Back in the Spring of 1962, Watkins was farming 348 acres of heavy black land. Those were Spring plowing days, and he was faced with a wet Spring. Like other farmers who sought more power with tandems and even triples, Watkins knew he had to do something and do it in short order.

He decided on two engines for one tractor and got the job done in 4 weeks. He used the chassis of an old IHC F-30. He salvaged Chrysler industrial engines and transmissions from 21-A Massey Harris combines.

To transmit power to the F-30 rear end, Watkins put gears on both transmissions and tied them together with a roller chain.

Watkins says his Siamese tractor "worked great." He used it as his main power source for 5 years, pulling a 5-bottom plow and also a multiple planting hitch made up of a field cultivator, a harrow, and a planter.

Servicing the two engines was not as much a problem as you might suspect. The Chrysler engines were L head equipped, and this gave him head and arm room above them.

Watkins points out that both engines had clutches, and this enabled him to run them together or separately. For plowing ends, for example, he merely shut one engine off.

Where is the tractor today? "Over in the junkyard," he reports. "Tractor pullers have scrounged some of the gears off of it, and they are still in use."

Soon after he built it, Watkins entered his Siamese tractor in pulling contests and caught the "pulling" fever.

Once he got into tractor pulling, he became concerned about how dangerous it was to have men step on and ride the sleds, which was the state of the art in those days.

Necessity being the mother of invention once again, Watkins designed the weight transfer machine (as it is known, officially). He also filed for patent.

Soon, Watkins noted his weight transfer machine was being copied, but builders were ignoring his patent rights. He sent letters to the copiers, asking for license fees. This annoved the copiers and they had the National Tractor Pullers Association sue Watkins for harassment. Watkins filed a countersuit and won. The decision rendered has become a landmark case, the first to use "re-issuance". Watkins says there is a lot of interest in the re-issuance procedure and that his lawyer gets calls from all over the country on how it works on a wide variety of patents, including many not even related to tractors or tractor pulling.