"Chain-Type" Cutterbar Cuts Faster, Smoother

vest two or three times faster than I can with a conventional grain platform," says Tom Loftus, Ivesdale, Ill., who came up with a high speed patented chain-type cutterbar he calls the "Razer" for his Case-IH 1660 combine equipped with a 20-ft grain platform.

Loftus had a local machine shop build a 50-ft. long continuous cutter chain, which consists of a continuously rotating chain equipped with replaceable sickle sections. He removed the existing 20-ft. cutterbar and wobble box and replaced them with the new cutting chain and a pair of hydraulic motors. One motor mounts at each end of the chain. As the chain rotates, it returns through a return trough under the platform in a slot that was originally used to store an extra sickle. Chain speed and direction are controlled from the cab.

"I used it last summer on wheat and this fall on soybeans and it worked great," says Loftus. "The problem with conventional cutterbars is that they limit harvest speed to 3 or 4 mph. The smooth, constant motion of my continuous chain cutterbar greatly reduces vibration, which in turn reduces shatter loss and allows a faster combine speed.

"It cuts much cleaner and allows me to har- This fall I went 4 to 4 1/2 mph in low 50 bu. per acre soybeans, but I could've gone faster if I'd had a bigger combine - probably up to 10 mph which is comparable to a row crop head. The higher cutting speed would allow a 20-ft. grain platform to do the same job as a 25 or 30-ft. grain platform equipped with a conventional cutterbar. The higher combine speed will also allow farmers with row crop heads to switch to a grain platform and harvest solid seeded beans without reducing their

"The continuously rotating cutterbar has more than twice the cutting surface of a conventional cutterbar and makes equal and full use of all sickle sections. As a result, in row soybeans the sections won't get dull in one spot like they do on a reciprocating cutterbar. Another advantage is that the cutting chain can be run both ways to get full use out of the sickle sections. When the knives are dull on one side, the direction of the chain can be reversed."

Loftus says the unit could be adapted to other combine brands.

Contact: FARM SHOW Followup, Tom Loftus, 224 Co. Rd. O East, Ivesdale, Ill. 61851 (ph 217 564-2242).



Split flow knife consists of a shank that bolts onto row cleaner mounting brackets. A 5in. wide sweep welds to bottom of shank. A fertilizer tube runs along back side of shank down to sweep where the tube splits to deliver fertilizer directly behind the point.

"Split Flow" Liquid Fertilizer Knife **Mounts Behind Row Cleaners**

"My new 'split flow' liquid fertilizer knife places fertilizer on both sides of the seed furrow which allows plants to use it more efficiently than with any other system on the market," says inventor Dave Primus of Mt. Auburn, Iowa.

The fertilizer knife, which is still in the prototype stage, was introduced at the recent Farm Progress Show near Windfall, Ind. It's designed to mount between Martin row cleaners and consists of a shank that bolts onto the Martin row cleaner mounting brackets. A 5in. wide sweep welds to the bottom of the shank. A fertilizer tube runs along the back side of the shank down to the sweep where the tube splits and bends outward to deliver fertilizer directly behind the point. The fertilizer is placed 2 in. to each side of the seed

"It's an efficient, simple design that has a

lot of advantages over other systems, which place fertilizer behind a coulter that mounts in front of the row cleaners," says Primus. "Placing fertilizer to both sides of the seed allows higher application rates and makes it less likely that you'll burn the seed. The sweep leaves the ground loose and fluffy without throwing soil from the seed furrow. Another advantage is that it eliminates the possibility that residue will be 'hairpinned' or jammed into the seed furrow, so seed-tosoil contact is better. The sweep leaves a nice black strip of soil that warms up fast in the spring."

The fertilizer knife is available only in limited quantities. Price had not yet been determined at press time.

Contact: FARM SHOW Followup, Martin & Co., 169 Allegre Road, Elkton, Ky. 42220 (ph 800 366-5817 or 502 265-5817).



Loftus mounted his high speed patented chain-type cutterbar on his Case-IH 1660 combine equipped with a 20-ft. grain platform. He calls it the "Razer".



Continuous 50-ft. long cutter chain is equipped with replaceable sickle sections. As chain rotates, it returns through a trough under platform.



"Plug-Buster" stands on legs 24 in. above auger sump and uses a heavy-duty iron plate containing 3-in. sq. grids. Each grid is fitted with a 6-in. long spike to break up chunks of grain, ice or snow before they reach the auger.

"Plug-Buster" Keeps Grain Moving In Bins

before they reach the auger," says the inventor of a new "plug-buster" for grain bins that simply stands over the unloading auger.

There are no moving parts and no power is required. The Plug-Buster consists of a heavy-duty iron plate that stands on legs 24 in. above the auger sump. The plate contains 3-in. sq. grids, each of which is fitted with a 6-in. long spike. A second model is fitted with sickle sections.

Inventor Willard Brusseau says the model

"It breaks up chunks of grain, ice or snow with spikes is ideal for situations where snow or ice chunks are a problem. The sickle section model is ideal for breaking up crusts and grain chunks. It eliminates the need to climb into the grain bin to break up plug-ups. It keeps grain flowing freely," he says.

> Will be built according to width of bin doors. Expected price is around \$250 when commercially available in early 1999.

> Contact: FARM SHOW Followup, Sand Iron & Steel Inc., 1339 Eastern Ave., Grafton, N. Dak. 58237 (ph 701 352-1145; fax 0570).

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