

New brackets let you attach spring tine fertilizer applicator with special point to front of Deere or IH planters without drilling or welding. Bracket adjusts up and down, and sideways.

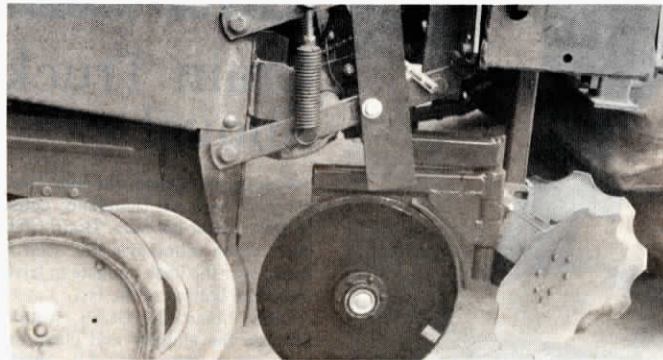
Deep Placement Planter Bracket

"Our deep placement bracket and tooth assembly for Deere and IH planters has been tested for over five years. It's the most economical and trouble free way to put liquid fertilizer to the side and just below the seed," says Miles Netsch, Terril, Iowa.

The brackets install without drilling or welding to the front of the planter. They're adjustable for depth and for sideways placement. They've been used in both no-till and reduced-till operations.

"There are no bearings to wear out and the small tooth on the spring tine can be turned to wear at both ends. They cause much less soil disturbance than double disc, deep placement units," says Netsch.

For more information, contact: FARM SHOW Followup, E & M Equipment, 905 Winnebago Ave., Fairmont, Minn. 56031 (ph 507 238-4884).



Disc applicator, center, swings on front swivel bracket that stands up to harsh no-till and rocky conditions.

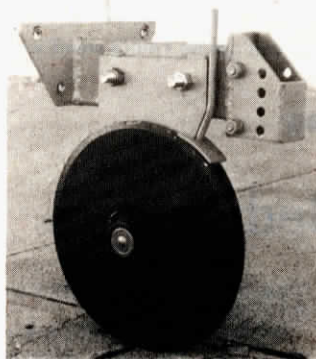
Swivel Starter Placer

"They swivel to relieve stress on the planter linkage when turning, and in hard ground," says Jerry Groff, Imperial, Neb., who's invented a new add-on double disc opener for starter fertilizer placement on Max Emerge and Kinze planters that's mounted on a unique swivel bracket.

Designed to place starter fertilizer 2 in. to the side of and below the seed, the "Swivel Starter Placer" is fitted with disc blades slightly offset to make a sharper trash-cutting edge and they're set at a narrow angle for minimal seedbed disturbance. A spring-loaded scraper inside keeps them clean in wet conditions and the Deere-built discs have a heavy duty hub and bearing assembly.

The disc assembly swivels on a heavy duty pivot that Groff says stands up to any no-till or rocky conditions. It mounts to front holes in the planter linkage which minimizes the tendency to hold the planter unit up. A dirt shield in front minimizes dirt accumulation between blades especially when used without a furrower in front.

Groff also makes a "Row Flex Placer" which mounts directly to the front of the planter unit giving row flexibility in rough ground with large planters without flexible toolbars. It features the same durable minimal



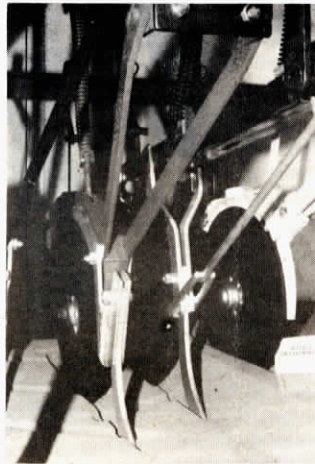
Groff's "Row Flex Placer" attaches directly to front of planter unit.

seedbed disturbance design as the Swivel Starter Placer.

"The swivel unit takes less down pressure away from the planter unit and works better in very hard ground, but requires relocating the furrowers (if used) to the main planter toolbar. The row flex model is better suited to large 12 and 16-row planters with rigid main toolbars where the furrower (if used) needs to flex up and down with the planter unit," explains Groff.

The Swivel Starter Placer sells for \$269. The Row Flex Placer sells for \$268.

For more information, contact: FARM SHOW Followup, Jerry Groff, P.O. Box 306, Imperial, Neb. 69033 (ph 308 882-4518).



Curved drill spikes pivot up for transport.

Grain Drill Spikes Wipe Out Tracks

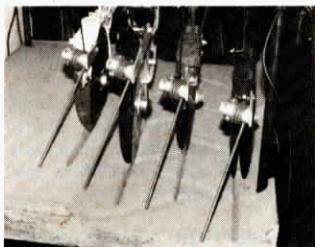
"We've used them for 20 years on our own farm," says Dave Ryden, Hallock, Minn., inventor of wheel track spikes for grain drills that dig into compacted wheel tracks just ahead of disc openers so seed can be planted normally.

The spike assembly bolts directly in front of openers that run in the tire tracks. Spikes are designed to pull themselves, and the discs, down into the packed soil, cutting a groove 3/8 in. wide and 1 to 1 1/2 in. deep which gets the seed down into moist soil so it'll sprout along with the rest of the seed. No heavier springs are needed.

"They don't dig up large clods like other such devices which leave a poor seedbed that'll dry out. Also, these spikes raise and lower with the drill discs and pivot up for transport. Depth control is adjustable and when they wear down you can replace just the spike," says Ryden. "Once installed, you can no longer see wheel tracks in grain fields."

The wheel track spikes, available for nearly every make of drill, sell for \$15 to \$17 apiece. Replacement spikes alone sell for \$5. Ryden also makes a harrow tooth drill attachment that fastens behind the disc opener and ahead of the press wheel. The harrow tooth mixes wet and dry dirt over the seed, helping eliminate the need for after-harrowing to cover uncovered seed.

For more information, contact: FARM SHOW Followup Dave Ryden, Ryden Development, 346 South Atlantic, Hallock, Minn. 56728 (ph 218 843-2576 or 218 843-2232).



Rear-mounted harrow tooth attachment mixes wet and dry dirt over seed.

"Danish" Injector Shank

"We combined a Danish springtooth shank with the bottom end of a coil shank to come up with a fertilizer injector that's got superior strength and flexibility as well as light draft and excellent sealing capabilities," says Floyd Ghere, Ghere Mfg., about the company's new NH3 injector shank.

The new combination shank keeps breakage to a minimum while the lower injection point is available separately to fit to other styles of shanks to convert an existing toolbar. Ghere's new shank can be used in conjunction with any style 21 or 25-in. shank which allows you to re-

place the conventional shanks with the new style over a period of time. Brackets are available to fit the shank to 2, 2 1/2 or 3-in. toolbars.

"Farmers like the durability of this shank and the fact that it seals better than conventional coil shanks," says Ghere.

The 21-in. model Ghere shank sells for \$29.60. The 25-in. model sells for \$31.75. The injection point alone, to mount on other existing shanks, sells for \$13.63.

For more information, contact: FARM SHOW Followup, Ghere Mfg., Box 7, Danville, Kan. 67036 (ph 316 962-5291).



New applicator shank combines the strength of a springtooth shank with the light draft of a coil shank.