

Trencher plow is equipped with a conventional boot as well as a 25-in. dia., 10-ft. long auger. The pto-powered auger can dig a trench up to 6 ft. deep in which tile is laid.

# **Auger-Equipped Drainage Plow Lays Both Big And Small Tile**

"Our new trencher plow is designed to do the work of both a trencher machine and a tile plow. As far as we know it's the only machine on the market that can put in big outlet tile as well as smaller lateral tile," says Junior Liebrecht, Continental, Ohio.

The first-of-its-kind, pull-type rig is equipped with a conventional boot as well as a 25-in. dia., 10-ft. long auger. The pto-operated auger is raised or lowered by operating a lever in the tractor cab and can dig a trench up to 6 ft. deep in which the tile is laid.

When the auger is raised up out of the ground, the machine is used as a conventional tile plow to install 4, 6 or 8-in. lateral tile up to 3 1/2 ft. deep. The auger is used to lay in 10 or 12-in. outlet tile at a depth of up to 6 ft.

"It works great for anyone who has to put in both outlet and lateral tile and doesn't want to pay for two machines," says Liebrecht. "Conventional tile plows can't lay in tile that's more than 8 in. in diameter. To lay in bigger outlet tile, most farmers hire a local contractor who uses a wheeled trencher ma-

"The auger can also be used to help lay in 4, 6, or 8-in. tile whenever you're going through a high spot and have to dig extra deep

in order to keep on grade. The auger's digging action eliminates the need to use a second tractor for extra pulling power. The auger is connected by chain to the boot so it can be lowered as deep as you need.

"The auger leaves a windrow of soil alongside the trench. You can come back later and use a tractor-mounted blade to push the windrowed soil back over the tile.

"When the auger is in operation the tractor has to go forward very slowly, so we recommend using a big tractor equipped with a creeper gear transmission, such as a Caterpillar 55 or Agco Allis or New Holland front wheel assist tractor, or the new Fendt Vario tractor. The tractor also needs a 1,000 rpm nto.

"Our trencher plow sells for about \$35,000 which is about twice as expensive as a conventional tile plow. However, a good used trencher machine alone sells for about \$20,000 and requires much more maintenance than our machine, which has fewer moving parts."

Contact: FARM SHOW Followup, Liebrecht Mfg., 17771 Rd. H-13, Continental, Ohio 45831 (ph 419 596-3501; E-mail: liebrech@bright.net; Website: www.farmdrainage.com)

Using small hydraulic cylinders that he bought at an auction, Armin Scripter converted an old My-D Handy squeeze chute from manual to hydraulic operation.

### **Manual Squeeze Chute Converted to Hydraulic**

When he bought a box of 12 small hydraulic cylinders at an auction a few years ago, Armin Scripter didn't have a clue what he'd do with them.

But, he says, "I only paid \$19 for the lot. I figured I'd eventually use them."

The Abilene, Kansas farmer and cattleman, with help from his son, Marvin, put several of those cylinders to use this past winter, converting an old My-D Handy squeeze chute from manual to a hydraulic operation.

They cut the old chute apart, built a frame, and hinged it back together and added the cylinders so they could squeeze from either side, top or bottom. Both head and rear gates open and close quicker than could be done manually. And, Scripter says, "this is really easier on the cattle than our manual gate was, because we can set the hydraulic pressure so it doesn't squeeze too tightly," he says.

The hydraulic controls were taken from an old fork lift. By mounting them all in the same place, one person can operate everything. "Before it took two people to operate the chute," he says.

The rock shaft for the main squeeze panel

was salvaged from a 715 IH combine.

They mounted a 5 hp 220-volt electric motor atop the chute and attached a hydraulic pump Scripter found in the box when he bought the cylinders.

The only new parts they bought were hoses and some fittings. "We used 3/8-in. hoses, but the valves were for 1/2-in. so we had to use adapters," he says. "It works fine, and is plenty fast, especially once the fluid gets warmed up."

Scripter says they finished it up just in time to use it last spring. He filled the hydraulic reservoir with used transmission fluid from a tractor. "I think automotive automatic transmission fluid might work even better, but I didn't have enough on hand when we needed to use it," he says.

Scripter figures he has less than \$100 in the conversion, not counting the value of the old squeeze chute. "Mostly, it was just labor in cutting and welding and making sure things worked right," he says.

Contact: FARM SHOW Followup, Armin Scripter, 3421 Mink Road, Abilene, Kan. 67410 (ph 785 461-5642).

# **One-Handed Gate Latch Holds Tight**

"I looked at hundreds of different gate closers all over the U.S. and I've never seen a simpler or more effective gate latch than the one I designed," says Ray Hoem, Buhl, Idaho.

When the gate is open, it dangles from the gate post by a chain. To close the gate, a "shepherd's hook" at the end of the closer hooks over the gate pole. Then you swing the long handle out over the gate wire and hook it. A chain link with a slot cut into it is welded to the end of the handle. It slips over the gate wire. The slot is small enough that cattle can't unhook it by rubbing on it.

"It allows for one-handed gate closing no matter how tight or big the gate. It gives you great leverage. Great for women and kids. And you can use it to close the gate from either side," says Hoem.

"It's made out of steel rod with a small brace on the back side of the hook to keep it from bending. You can adjust the tightness of the gate by adjusting the length of the chain on the gatepost."

Contact: FARM SHOW Followup, Ray Hoem, 3972 N. 1400 E, Buhl, Idaho 83316.



To close the gate, a "shepherd's hook" at the end of closer hooks over gate pole. Then you swing the long handle out over the gate wire and hook it.



A chain link with a slot cut into it is welded to end of handle and slips over gate wire. Slot is small enough that cattle can't unhook it by rubbing on it.

## Iowan's Folding 24-Row Cultivator Gives Two 12-Row Units New Life

When he switched to using to a 24-row planter three years ago, Dan Wood, Garner, Iowa, wanted a row cultivator to match.

He couldn't find a 24-row cultivator at a dealership and rather than having one custom built, he decided to make it himself. He started with two Deere 12-row (30-ft.) folding toolbar cultivators and painstakingly put them together into one.

He started by taking the center toolbar section out of one cultivator and replaced it with a 26 ft. long, 10-in. square tube. He hung 10 row units on the tube. On the ends of this new center section, he added two 12 1/2-ft. sections (for 5 rows), hinged to fold up. On the outside ends of the two 12 1/2-ft. sections, he added 4 1/2-ft. sections with two row units each.

When the cultivator folds for transport, the short end units drop in flat on top of the next sections. Then both units fold up and past center to rest over the center section. Wood says the cultivator is about 13 ft. high in transport position.

To make the lift work properly, he had to lengthen the linkage arms on the cultivator. And, although he used the hinges from the old cultivators, he had to put in heavier tubing and a longer, heavier hinge pin.

While this sounds simple enough, Wood says he and an employee put more than 200 hours into the project. "The hardest part is cleaning up the old cultivators, going through them and making sure the parts are good and then repainting everything so it looks right," he says.

When he finished his 24-row cultivator, Wood found a couple more 12-row models and made a second big one.

"They cost me between \$16,000 and \$17,000 each," he says. "But you have to have a cultivator this big custom made, So I figure I saved at least \$15,000 each by making them myself."

Contact: FARM SHOW Followup, Dan Wood, 2140 Welch Ave., Garner, Iowa 50438 (ph 515 923-3312; E-mail: woodfarm@ncn.net)