"Twin Fins" Improve Cultivator Performance

Ken Tatarliov says he achieved his goal of better weed control on his organic farm by designing twin cultivator fins that do a better job of slicing through weeds.

After six years of product development and testing, Tatarliov has patented the twin fin design and put it on the market.

He says the idea is equally useful on any sweep, whether it be 11-in. air seeder sweeps or 16-in. bolt-on deep tillage shovels.

The fins themselves are 4 1/2 in. tall, welded to the sweep at an angle. They're made from soft, flat steel bar (836/44w) that's 2 in. wide and 1/4 in. thick.

"Our design kills more weeds per pass and saves us time, fuel, equipment wear, and money," he explains. "Throughout our testing period we observed that our fins consistently demonstrated a weed kill as close to 100 percent as what we believe is mechanically possible."

Tatarliov says the fins keep tap-rooted weeds from slipping around the outer edge of the shovel blades, cutting them off. Although the fins are only 1/4 in. thick, the plant material they collect increases their width to about one inch, thus increasing the soil disturbance and controlling more shallow-rooted weeds as well.

Since he operates a certified organic farm, Tatarliov relies solely on tillage for his weed control. His invention has allowed him to improve his weed kill success, as well as limit the number of passes.

"Since perfecting the fins, we've been able to omit our second round of summerfallow work, and we no longer need to pre-work most of our spring seeding acres. Any pre-work we do is spot control on small areas of weed flush."

Since the high-carbon hard steel shovel does most of the work (the already loosened soil simply falls away from the shank and into the fins), there's very little wear on the soft material, plus Tatarliov wanted the fins to be able to bend rather than break if they hit a stone. It's simple to straighten them with a pipe wrench while refueling, he says. During an entire season, he may need to straighten only one or two fins.

Tatarliov's company, Bema Industries, sells the twin cultivator fins by modifying new McKay shovels (parallel wing design only). The 16-in. wide, 1/4-in thick tillage sweeps done up with fins, are currently priced at $19.23 (Can.) each, which is only about $3 more than standard sweeps. Bema Industries also sells twin fin-fitted Nichol shovels for the same price.

All fins are guaranteed for the life of the shovel. This means they will stay affixed, and not wear out before the sweep.

Twin fins measure 4 1/2 in. high and are welded to the sweep at an angle. They keep tap-rooted weeds from slipping around outer edge of shovel blades, cutting them off.

Over the 2003-2004 season, the inventor says it cost him $77.50 (Can.) more than standard shovels to outfit his own 31-ft. cultivator, and he got two seasons' use out of them.

"We save about $1,700 in fuel because of the reduced passes, and that doesn't include our time, improved weed control and lower wear and tear on the machine," he adds.

Shipping is charged FOB Bema's plant, other than U.S. orders where, in this case, the freight costs begin from Plentywood, Montana.

There's a video on the company's website of the modified shovels at work.

Contact: FARM SHOW Followup, Bema Industries, Ken Tatarliov, P.O. Box 69, Minton, Sask., Canada, SOC 1T0 (ph 306 969-2275 (evenings); ken @ bema industries.com; www. bema industries. com).

Tool Breaks Dual Wheels Apart

You can loosen the most stubborn dual wheels with this tool designed by Lloyd Brubacher of Moorefield, Ontario.

"It works in reverse of the snap couplers that hold the duals on the T-rail. Rather than pulling the handle into a locked position to hold the duals together, this tool pushes them apart," says Brubacher.

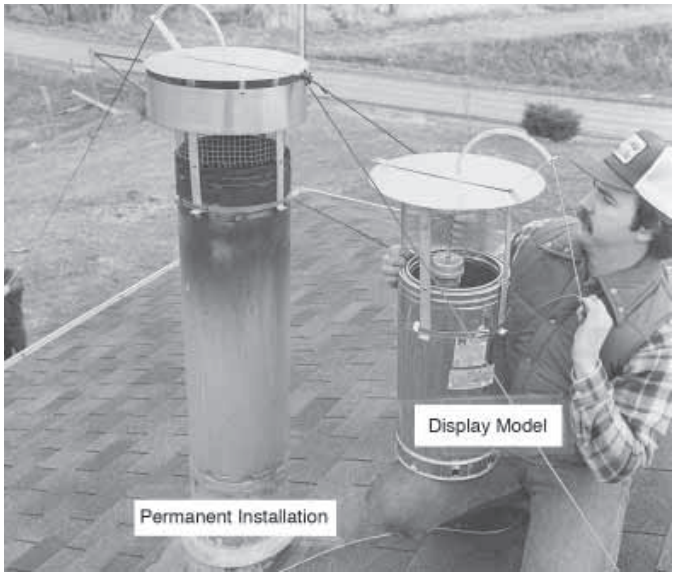
The steel tool is equipped with a handle that acts against a long rod. Just drive the inside wheel up on a block, remove the snap couplers and then slip the base of the tool over the T-rail. Pushing down on the handle provides the leverage to extend the rod and push the wheel off.

"It's a lot easier than using crowbars, wrecking bars, or log chains to break them apart," says Brubacher, who operates a tire repair shop. "The rod is threaded so you can adjust its length depending on the wheel's width."

Steel tool is equipped with a handle that acts against a long rod. Pushing down on handle provides the leverage to extend the rod and push wheel off.

Sells for $49 (Can.) plus S&H.

Contact: FARM SHOW Followup, Lloyd Brubacher, 8360 8th Conc., Rt. 2, Moorefield, Ontario, Canada N0G 2K0 (ph 519 638-3413; fax 519 638-5510).



Ground-controlled chimney sweep is shown permanently mounted on house, and with display model.

Do-It-Yourself Chimney Sweep

By C.F. Marley, Contributing Editor

With the growing popularity of wood and corn burning stoves, the chimney sweep business is booming. But I don't like to pay for things I can do myself, so I invented and patented a do-it-yourself chimney sweep that I can use without climbing up on my roof.

Although it never caught on with the public, the sweep we installed at our house has given us more than 20 years of dependable service.

If you want a ground-controlled chimney sweep like mine, you'll have to build it yourself since it's no longer on the market.

We recommend using stainless steel for all the essential parts. Ours is all stainless steel except for the weight. It's absolutely essential to use stainless steel cable because creosote will ruin galvanized steel in a hurry. Our 3/8-in. dia. stainless steel cable is 20 years old but is still in good shape. You should attach a rope to the end so it won't cut your hand.

The nice thing about a ground-controlled sweep is that you can sweep at any time, even when it's cold and there's snow on the roof. You can also sweep while the fire is burning. In fact, I think it sweeps better in hot weather than cold weather.

Let the weight pull the brush down and then pull it back up with the rope. Run it up and down several times. Once the flue is clean, pull the brush up to "parking" position. There needs to be enough space between the top of the flue and the brush to allow the smoke to get away. Make yourself some kind of fastener on your house where you can tie the rope.

Most of the parts can be chased down on the internet. You only need 2 to 3 in. of brush to be effective.

Contact: FARM SHOW Followup, C. F. Marley, P. O. Box 93, Nokomis, Ill. 62075 (ph 217 563-2588).

Fence crossing consists of a series of corrugated barn roofing tin panels bent over a cable. Panels pivot backward as water rises, then fall back in place as water recedes.

"Breakaway" Creek Fence

"Over my 77 years of life here in north central Oklahoma and southern Kansas, many times I've been involved in the construction and repair of fence line creek crossings. But recently I found a fence crossing design that I've never seen before," says Ivan Pfalser, Caney, Kansas.

According to Pfalser, most of the creeks in his area are dry 90 percent of the year but turn into raging flood waters after heavy rains. The fence crossing he discovered is located a couple of miles south of Havana, Kansas. It consists of a series of old corrugated barn roofing tin panels attached to a cable, which is stretched across the creek and attached to a couple of steel pipe corner posts. The tin panels are simply bent over the cable. They're cut to length so the bottom ends just touch the creek bottom and its sloping sides. The tin panels simply pivot backward when the water rises, and then fall back in place as the water recedes.

"It's not pretty, but it seems to be doing the job," says Pfalser.

Contact: FARM SHOW Followup, Ivan L. Pfalser, Rt. 1, Box 162, Caney, Kansas 67333 (ph 620 879-2938).