



Richard Johnson made some of his car spring tools 50 years ago. Amazingly, he says he's never had to sharpen them.

## Car & Truck "Spring Tools" Never Lose Their Edge

Check out Richard Johnson's handmade tools and you'll notice a common theme — they're all made from car and truck leaf springs.

"You put an edge on leaf spring metal, and as long as you're not banging it on stones or concrete, it's sharp for life," says the retired foundry welder from Morrisville, N.Y.

He still has the first car spring tool — an ice chisel — he made more than 50 years ago. It got plenty of use on Lake Champlain when he was younger, Johnson says, and he's never had to resharpen it. He sliced the end of a 3/4-in. pipe to slip in the 1 1/2-in. wide car spring and brazed them together with a brass-welding rod. He topped the pipe with a coupling for a handle.

Johnson slipped the eye of another car spring over a wooden handle to make a froe to split wood. He sharpened one edge with a grinder. He uses it to lop off small branches.

"It gives a good clean cut. Anybody who makes one will find a lot of uses for it," he

says, adding that it could also be made into a drawknife with a longer blade and another handle.

For a pickaxe, Johnson started with a 2-in. wide spring from a truck and used a chop saw to make a sharp bevel cut at both ends. He welded a metal pipe in the center for a handle. It works well to cut small tree roots and level off small rises in the yard.

Among Johnson's car spring inventions is a snow sled he built for his three daughters when they were young. He used a long truck spring with eyes in each end to attach to runners and added a seat.

"I like to putter," Johnson says, noting that the tools he made cost almost nothing. "The good Lord's blessed me with metal working and wood working skills."

Contact: FARM SHOW Followup, Richard Johnson, 102 Banker Rd., Morrisville, N.Y. 12962 (ph 518 561-2587).

Chicken steps on an aluminum tread plate to open feeder's hinged lid, giving the chicken access to food. Lid closes when chicken steps off plate.



## Auto Poultry Feeder Saves Feed, Time

"Backyard chickens have historically been fed by scattering food on the ground or by using gravity-fed, open feeders which allow free access for rats, mice and wild birds. Our feeders are unique in that they allow chickens full and free access to their food while stopping rats, mice and wild birds from getting at it," says Mark Kirkham, whose father invented Grandpa's Poultry Feeders.

The sturdy, galvanized steel feeders have an aluminum tread plate. When a chicken steps on it, the bird's weight opens the feeder's hinged lid, giving the chicken access to food. The lid closes when the chicken steps off.

It takes a couple of weeks to train the chickens to step on the tread plate. A video on the company's website shows the three-step process.

In addition to saving feed, the feeder also solves the problem of finding someone to feed

the chickens when owners are gone for a long weekend or short vacation. A standard feeder (\$210) holds 20 lbs of feed — enough for six hens for 10 days. The larger feeder (\$290) holds 40 lbs. to feed 12 hens for 10 days.

"There's a large savings in the chicken feed bill due to keeping scavengers out of the feed, along with severely reducing the risk of disease to both humans and chickens that these pests carry," Kirkham says.

Designed in New Zealand 14 years ago, the first feeders are still working flawlessly after exposure to the elements and continuous outside use. The feeders are available in North America through a Georgia business that sells a variety of imported products.

Contact: FARM SHOW Followup, Grandpa's Feeders, 375B Green Valley Rd., Griffin, Ga. 30224 (ph 678 373-4041; www.grandpasfeeders.com).



Chris Juel uses his garden tractor to pull his portable hothouse around. "It lets me give plants an early start in the spring," he says.

## Portable Hothouse Rolls Where Needed

"It lets me give plants an early start in the spring. I use my garden tractor to pull it around," says Chris Juel, Scobey, Mont., about his portable hothouse.

The low-cost plant starter is made from 2 by 6's and 5/8-in. thick plywood and measures 4 ft. wide by 8 ft. long. It rides on four 8-in. wheels and is equipped with a hinged, curved transparent cover that's fastened to metal hoops. The hothouse's plywood ends are painted black. Potted plants set on a layer of heavy plastic that keeps the wood from rotting.

"It cost very little to build," says Juel. "I use it every year to start early tomatoes. I keep it close by my house to take care of the plants. Then when it's time to plant I pull it out to my garden. I can put an electric



Hothouse has a hinged, curved transparent cover that's fastened to metal hoops. Potted plants set on a layer of heavy plastic.

heater inside if the weather gets colder than normal."

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## All-Steel Broadfork Guaranteed For Life

Sometimes old-fashioned tools work the best, but a new little technology can make them even better.

Bob Powell thinks he's done that with his company's first product — an all steel broadfork. He got the idea from neighbors who liked using broadforks, but complained about the wooden handles.

"They would often break off unless you were doing very light work," Powell says. "I created this all-steel tool solely because people were frustrated."

He made the handles out of steel pipe and uses precision high-strength steel for the welded 4-tine fork.

"The tines have a gently curved shape. I put a lot of effort into finding the best shape of tines to go in to the ground easily and still be strong enough," Powell says. "I'm confident enough to offer an unconditional lifetime guarantee."

The broadfork can be used for two purposes: breaking up new ground and aerating the soil. To break new ground, push the tines into the ground, stand on the broadfork, move the handles back and forth, step off the broadfork and pull the handles to the ground. Step back a few inches and repeat.

To aerate, just push the broadfork in the ground (usually a tilled bed) and pull back on the handles to create an air space deep in the ground. Aeration improves the soil's water retention and allows roots to grow deeper.

"It has an advantage over tilling as it aerates without mixing up the soil layers, which is beneficial for organic growing," Powell says. "Soil microbes live at different depths, and it's often a good idea to loosen and aerate without mixing up the layers."

Broadforks come with 14-in. long tines (22 lbs.) and 16-in. (25 lbs.) and cost \$250 (including tax and shipping). For FARM



All-steel broadfork eliminates the problem of wooden handles breaking off.



Broadforks can be used to break up new ground and also to aerate soil.

SHOW readers who prefer to weld on their own handle, Powell sells just the tine portion for \$80 including shipping.

Forks can be purchased through the Powell's website.

Contact: FARM SHOW Followup, Meadow Creature LLC, P.O. Box 2112, Vashon, Wash. 98070 (ph 360 329-2250; www.meadowcreature.com).