Reader Letters

You published a letter in your last issue that suggested using a shop vac to remove sludge from fuel tanks. This is not safe. Electric motors produce a constant arc while running. Someone in Iowa tried to prepare his motorcycle for winter storage this way a couple years ago. The resulting explosion killed him and burned down his house. ***(Paul Halferty, Ottumwa, Iowa)***

Shop vacs have non-spark protected electric motors, which will cause an explosion if ingesting gasoline fumes. I know of two such explosions: one when a fellow was using a shop vac to clean gasoline off a shop floor and the other when a fellow was cleaning gasoline out of a boat bilge. The individual in your article may have been working on a diesel fuel tank or else he has unusually powerful angels around him. ***(Jim Cukrowicz, Grand Junction, Mich.)***

Editor's note: The story referred to in the two letters above neglected to mention that the shop vac idea was used on a tractor powered by diesel, not gasoline. However, as several readers pointed out, it's probably not a good idea to use on any kind of fuel because of the risk of fire or explosion.

The story in your last issue on the Mobile Fuel Factory was interesting. But please explain why the University of Minnesota, in a project funded with taxpayer dollars, would have the prototype built in China. U.S. manufacturing is devastated by the recession, and we also know that China does not respect patent law, so this project not only gave away manufacturing jobs to China but also the technology. This project should have been designed, built, tested and manufactured in the U.S. ***(Keith Kimball, kkimball@xplornet.com)***

Here's a handy garden cart that carries just about everything you need for a day in the yard or garden. I mounted a 55-gal. plastic drum on top of an old mower deck,

drilling holes in the top to hold shovels, rakes and other long-handled tools. A hook on front holds a 5-gal. pail and a wire shelf attaches to hangars between the drum and the push handle. Tools, cords and other items hang off the push handle. It's a simple idea that saves a lot of time running back and forth. You could never carry all these tools in a wheelbarrow. ***(Lewis P. Tomlin, 16391 Gun Barrel Road, Montpelier, Va. 23192)***

I attached an old mop handle to a short-handled garden claw to make a "stand up" weeding tool. It works great because you can get around plants without getting on your knees. ***(Carol Heuschkel, Winsted, Conn.)***

I use a large bit from an old bit & brace drill in my cordless drill to fertilize trees. Just drill holes 6 in. deep in the ground around the drip line of trees and fill them with fertilizer. Much cheaper than those fertilizer spikes you can buy. ***(Vermnon Schoen, Oak Ridge, Mo.)***

We use an old tennis racket for skimming debris off stock tanks in the barn. It's cheap and hangs on a nail when not in use. ***(Allen & Mary Ann Mossner, Frankenmuth, Mich.)***

If you've got elderly or disabled family members who are having trouble negotiating steps, here's an idea we came up with to help. You can make a portable half step using 1 by 4-in. boards with a 5-ply cover and a rubber non-skid surface on top. ***(Rex Gogerty, Hubbard, Iowa)***

I was interested in the article in your last issue about the MJSI Dual Flush toilet conversion. I have been using one of these kits for about 6 mos. and it works very well every time. I recommend purchasing the fill valve as well because it has an adjustable flow rate valve and a spray bar that lies in the tank bottom to prevent sediment buildup. Money well spent. ***(Bob Mork, Sevierville, Tenn.)***

If you have a wireless Driveway Alert alarm that tells you when someone comes up your driveway, here's a way to extend the range of the system. Take a pair of walkie talkies and put one by the reception unit in the house, set to VOX, and carry the other unit with you. Then when someone drives into the yard, you'll know even if you can't see the driveway. Comes in handy when you're expecting someone and want to leave the house. ***(Glen Schweppe, Syracuse, Neb.)***

The drive unit on my Deere walk-behind snowblower kept breaking down. I replaced the drive with a hydrostatic unit from an Uber feed cart. A Cub Cadet transmission would also work. The frame of the snowblower was too small so I used 2-in. angle iron to build a platform to support the new drive unit. It worked great – lots of power. ***(Phillip Krywosa, Boonville, N.Y.)***

My friend, Ed Gantz at Gantz Farm Service, New Hampton, N.Y., installed a hydraulic-controlled snow blade on his 700 cc Arctic Cat 4 by 4. If you look closely at the picture, you can see that the front wheels are lifted off the ground by down pressure. For hydraulic power he used a power steering pump, driven by a double pulley on the engine that also drives the alternator. He mounted a hydraulic cylinder on front of the tractor and ran a hose to a control valve. It pushes snow where the big rigs can't go. Works great. ***(Richard Bader, Middletown, N.Y. for Edward Gantz, New Hampton, N.Y. ph 845 355-1116)***

Sometimes water drips off the eaves of my mobile home and freezes on the handle of my storm door. So I cut a small piece of rubber inner tube and punched a couple holes in it so it can be attached over the handle with a plastic tie wrap. It diverts the water just enough to keep the push button free of ice. ***(Woody Cone, Rochester, N.H.)***

My neighbor, Lori Reichard, made up this little gadget, which does a fantastic job. I have two long runs of garden hoses to livestock tanks that always freeze up no matter how carefully I tried to drain them after filling tanks. Now I just screw this little gadget onto the end of the hose and attach it to an air compressor. It will blow a 100-ft. hose dry in about 30 sec. It requires about 125 psi to do a good job. ***(Jim Cole, Ottawa, Kan.)***

We were having trouble with mud on our farm drives. Gravel would just disappear down into the soil. We had an abundance of old trees that needed to be cleared and used a pto-powered chipper to chop up the branches. We ended up with quite a pile of wood chips so we put them on a roadway. To our amazement, the chips stayed in place where rock and gravel would have disappeared. The horses are more comfortable walking on chips than rock. We've had a lot of snow and ice this winter and the chips offered more traction than rock on the drive. All in all, we plan on covering all of our drives with wood chips, saving the cost of gravel. ***(Robert Cox, ph 816 868-6375; coxbob@sbcglobal.net)***

At one time, I had a gelding that needed to have his sheath cleaned about every month or he would get urinary tract infections. I got tired of expensive gel soap dribbling down my forearm and landing in the dirt, so I made a squeeze

bottle to get the soap to where it was needed. A couple other cowboys in my area heard about it and wanted one so I started making them for the public.

It's just a simple device to assist in the efficient performance of a very necessary hygienic procedure for all geldings and mares. I call it Uncle Jed's Weenie-Kleen. Comes with soap and instruction booklet. Sells for $30 plus S&H. ***(Jed Greene, 6301 Grand Ave. 112, Ft. Smith, Ark. 72904 jedgreene@jeffnet.org)***

I enjoyed building this 1/4-scale model of a 1912 Red Wing 5 hp "hit and miss" engine. It runs well with ignition provided by a Ford buzz coil and a spark plug.

I bought the castings and the finished timing gears from an acquaintance, who had purchased the casting kit from a mail order company. He had already machined the flywheels, the cylinder head, and most of the cylinder block.

The piston was the first part that I machined, using an extruded cast iron blank that came with the kit. The finished 1 1/4-in. dia. piston had to be .002 in. smaller than the bore, and the ring grooves a very close fit to the two piston rings provided. The 5-piece crankshaft was made from steel stock and is press-fit together. The connecting rod is tapered and the ends silver-brazed on. The intake and exhaust valves are identical. The stems consist of drill rod, with the stainless steel faces silver-brazed on with Harris Safety Silv 56. The valves are lapped to the seats. I machined the mixing valve (carburetor) from a brass casting that came with the kit.

The most challenging part was making two very small holes intersect inside the tiny casting. A little J B Weld bailed me out here. The brass castings for the governor were finished by hand.

The engine has a 2-in. stroke and a 1 1/4-in. bore, with a displacement of 2.45 cu. in. The engine develops about 1/10th hp at 300 rpm's.

There's a brass sheet metal gas tank inside the base casting. The water hopper holds about a cup of water, and the oiler holds a teaspoon of oil. The main bearings and the big end of the connecting rod are lubricated via grease cups that I bought.

All the machining took about 300 hours, and the assembly took another 10 hours or so. I mounted the engine on an oak skid that bolts down to the floor of a homemade miniature hay wagon, which I pull around at antique tractor shows. ***(John Magnuson, 4640 Ensign Ave. N., New Hope, Minn. 55428 ph 763 533-5787; magnu@msn.com)***