

# Reader Letters



Thanks for the "Owner's Report" on corn-burning stoves (Vol. 18, No. 6, pg. 28, 29). We've had over 1,000 calls and letters since it came out. However, I must take exception to a couple of the comments made by Dave Tjosvold at Alpha American, Palisade, Minn.

Mr. Tjosvold states that clinkers - unburned corn - often have to be removed with a hammer, especially from cast iron burn pots. That's true only if furnaces or stoves are top-fed and not bottom-fed like the old-fashioned coal stokers my Superior Biomass Furnace is patterned after. If the appliance is bottom-fed, it doesn't make any difference what material the burn pot is made out of, clinkers are essentially pushed out of the burn pot with no problems. With my furnace, for example, clinkers drop through the burn pot into the ash pan below. You simply empty the ash pan about once a month.

Perhaps what Mr. Tjosvold should have said is that top-fed systems just aren't the way to fly. Period.

Mr. Tjosvold also states he's working with a special ceramic material for the burn pot on his redesigned furnace. I've explored that option, too, and you can rest assured you won't be able to afford any furnace with a ceramic burn pot.

I invented the world's first and only reliable corn-fired boiler and have spent the last seven years of my life perfecting my furnace. Corn-burning is tricky business and when you're trying your hardest to deliver a good, quality product, it really burns you up when somebody makes uninformed statements like these. It gives everybody in the industry a bad name. (**Randy McLachlan, Ja-Ran Enterprises, 3541 Babcock Road, Lexington, Mich. 48450**).

In stating that I "regularly" clean clinkers out of my A-Maize-Ing Heat furnace, your "Owner's Report" on corn-burning stoves makes it sound like I'm constantly down in the basement cleaning out my furnace. In my case, "regularly" really meant once a month.

I'd also like to clarify a couple of other points made in the article.

First, the A-Maize-Ing Heat corn-burning furnace does not have a stainless steel burn pot, as your story states. It has a cast iron burn pot. Our corn-fired boiler has a stainless steel burn pot.

Second, my furnace has the capacity to burn up to 5 bu. of corn per day. I've never burned that much, however - normal usage is 1 to 2 bu. per day in 0 to 20 degree weather. (**Larry O'Brien, R.R. 3, Box 229, Olney, Ill. 62450**).

Your "Owner's Report" on corn-burning was enjoyable and informative. I've answered a lot of farmers' questions about corn-burning stoves since your article came out. Unfortunately, many of them concerned building their own stoves.

Apparently this interest was generated by the two gentlemen featured who built their own furnaces. I'd like to point out that one of the men uses PVC pipe for an exhaust pipe. That would never be U.L.-approved and could be dangerous.

When I've been asked lately, I tell people that building stoves is something best left to the professionals unless the individual really knows what he's doing. (**Chad Jasse, Eneco Corporation, 536 Imperial Rd. N., Guelph, Ontario N1H 1G4**).

To keep calves' ears from freezing after birth during winter, we take a nylon stocking and cut the foot out so there's about 2 ft. of stocking, left open at both ends. You pull this nylon tube up over their head and

ears until just the nose sticks out of the hole. (We've never done it, but you could cut slits in the stocking for eyes.) The nylon holds the ears close to the calves' heads, and the warmth from their body helps dry wet ears. It takes 2 to 4 hours to dry wet ears and keep them from freezing and breaking off. (**Daniel Maher, HCR 81, Box 34, Morristown, S. Dak. 57645**)

My husband makes portable snow fences out of the 16-ft. long by 4-ft. wide skids that laminated wood comes on from the lumberyard. Our son gets the skids for free at



the local cabinet shop he works at. My husband mounts an A-frame on each skid. One side of the A is corral fencing we no longer need; the other is corn crib fencing. Crib fencing could be used on both sides, however. My husband bolts or nails the bottom of the cattle panel and fencing to the bottom of the skid. He wires the panel and fencing together at the top to form the A. Then he just pulls the portable snow fences to wherever he thinks they'll be most needed with his Deere 5-wheeler. When not in use, the fences are easily stored on our now empty cement feedlot floor. (**Mrs. Charles Wiechert, RR 6, 900 SW 98th, Lincoln, Neb. 63532**).

I've always thought it would be a good idea to make a grain wagon "door flag" so you could tell whether the end gate on your wagon is open or shut from the tractor or combine cab.

It wouldn't take much to make. A piece or strip of iron about 3 ft. long bolted to the upper lip of the door would probably do the trick. You could make your flag out of whatever material you prefer - even a handkerchief. Fastening it to the top of the "flag pole" would tell you by its position whether the gate is open or shut. (**Arthur R. Miller, 1634 N. 900 W., Thorntown, Ill. 46071-9335**).

The exhaust system on my Oliver 2255 tractor with Caterpillar V-8 diesel engine always left something to be desired - and the system's performance didn't improve with age.

The manifold ports on the original exhaust system pointed straight down from the manifold. There was one pipe on each side of the tractor, and they came together directly under the motor's oil pan, which made for a really efficient heater for the engine oil. That's good for Alaska, maybe, but not Texas. What's more, the exhaust pipes would always burn through and I'd start getting fumes in the cab.

To solve the problem I made a new exhaust system for the tractor. I started with 3/4-in. thick steel plate and machined out manifold ports to match the ports on the engine. I put spacers made out of square tubing 3/4-in. long on two sides of the plate where I planned to run new exhaust pipes, which I made out of 3-in. dia. pipe. The origi-

nal pipes were made out of 2-in. dia. pipe and I used bigger pipe to ensure there'd be no back pressure buildup.

I still use two pipes running straight up, with oval mufflers so as not to obstruct my view, on each side of the tractor. But I'm running the exhaust out of the center of the engine so it balances pressure better than it did when it was run out one end and joined underneath.

For about \$50 in materials, I don't get any fumes in the cab, I get better oil pressure since the oil isn't heated anymore, and I get an engine that breathes a lot better. (**Melrose Nitsche, Rt. 9, Box 187A, Converse, Texas 78109**).

In the "Best & Worst Buys" section of your last issue (Vol. 18, No. 6) I was quoted as saying I had problems with my 1992 Bush Hog. The description of the problems was right, but the brand name was wrong. The problems were with my Howse rotary cutter. My sincere apologies to the Bush Hog company. (**Charles D. Corlew, 5651 Hwy. 48, Cunningham, Tenn. 37052**)

Thank you for your report on our "Oil Miser" that makes it easy to recover unused oil left inside plastic oil bottles (Vol. 18, No. 6). At this point we have working models but haven't yet started manufacturing it. We hope to have units for sale in six to eight months. Once we begin production we'll contact those people who have already called or written to us to let them know it's ready for sale. (**Koberg Fluid Systems, 420 Shepard Dr., Marietta, Ga. 30064 ph 404 425-0907**)



In 1982, when my wife and I decided to build a large 46-ft. by 60-ft. "passive solar" house with 26 ft. high specially constructed arch rafters, finding an efficient heating system became a priority. We went with a "hydronic floor," which we've never regretted.

The floor is simply a concrete slab with 1 1/2-in. dia. black plastic pipe designed to withstand up to 200 psi running underneath the cement in about 1 ft. of sand. The water pipes running from our 125,000 Btu boiler are arranged at 4 ft. intervals in a circular design like a burner on a stove.

First, 1 in. of styrofoam was laid for insulation. Then, sand was brought in and dumped on top of the styrofoam. Then pipe was laid in the sand and sand was compacted. Then plastic was laid down to keep the concrete from drying too fast when it was poured and to act as a moisture barrier. Next reinforcements were put in. Concrete was poured to an average depth of 4 in. over the main portion of the floor but deeper around the sides to support the weight of the special rafters. Then R-20 styrofoam went around the periphery of the floor. Next, 1/2-in. thick pressure treated plywood went over the styrofoam so moisture from the ground wouldn't damage the styrofoam. Finally, an area around the floor was backfilled for additional insulating value.

All the work paid off. We're able to walk on the floor in our stocking feet without a hint of a chill on the very coldest winter days.

Moreover, our heating and electrical bills only come to about \$2,000 a year. Remember, this is a large house - some 2,700 sq. ft. Of course, some of the energy savings come from the triple-glazed windows

on the southeast facing wall which permit solar energy to heat our home from May to September.

Incidentally, we got a \$3,000 grant from our utility company, Saskatchewan Power, to help build our "passive solar" home. (**Nick F. Rogalski, Box 1647, Melville, Sask., Canada SOA 2P0**).

Three of my brightest ag mechanics students are big fans of FARM SHOW and were especially thrilled with your article on a motor-driven wheelbarrow (Vol. 18, No.



3) because they'd already built one.

Steve Wipf, Darius Clement and Amos Decker, who graduated last spring, are the kind of kids that, if there's a pile of spare parts around, they've just got to make something out of it. They spent a lot of last winter building a walk-behind powered garden cart of their own out of spare parts we had around the school.

The cart's frame is made of angle iron. Axles and steering mechanism are out of a junked Ag Way garden tractor, as is the Briggs & Stratton engine. The garden cart has hydrostatic drive with variable forward and reverse. Racks are removable from the 30-in. by 42-in. carrying deck. And the cart dumps.

For no more than \$80, the students built a powered wheelbarrow that's capable of carrying several hundred pounds of feed, bales, or landscaping and gardening equipment. (**Gerry Loucks, Agricultural Mechanics Instructor, Northern Catskills Occupational Center, P.O. Box D, Grand Gorge, N.Y. 12434**).

Rocks in our hay fields cause real headaches when we're swathing. It's impossible to pick all of them up, so I made a heavy-duty "Rock Roller" for pushing them into the ground.

It's made out of a 36-in. dia. section of



road culvert 12 ft. long and filled with 3 cu. yds. of concrete. A 3-in. dia. pipe runs through the center of the culvert section. Stub axles off a 914 International combine fit right inside the pipe. Axles mount in two 1/2 in. thick steel plates, 18 in. wide by 20 in. long, bolted to the sides of the frame of an old chisel plow. We pull the "Rock Roller" with a 1070 Case tractor, but any tractor rated at over 100 hp. would probably do. You have to slow down on corners because the weight of the roller - 5 tons - will push you around. Otherwise, we can run at field speeds of between 8 and 10 mph.

When the ground is moist enough, we're able to bury all the rocks up to 6 in. in dia. I invested only \$1,000 in the device. (**Grant Gulleson, R.R., Box 17, Rutland, N. Dak. 58067**).

Here's a handy little invention I've used for six years and definitely would not be with-