## "Hybrid" Double Crop Planter

Double-cropping of milo and wheat has been speeded up by two Illinois farmers who have mounted planter units right on their combine.

Owen and Neal Hilvety, of Moweaqua, bolted IH Cyclo seed boxes to the top of the combine, with hoses leading to the air planter units. Rear wheels of the combine are moved back 40 in. to make room for the planter units and coulters, which are mounted on separate tool bars. The planters are raised and lowered by hydraulic cylinders operated by electronic controls near the combine seat.

"The chopped straw is dumped just ahead of the rear wheels, and it makes a good mulch in dry years," Neal Hilvety told FARM SHOW.

The planter modification is on a Model 403 International combine, but the Hilvetys think it would work on other models. They note that bigger combines have plenty of power to operate both the combine and the planter, and their set-up has never given them problems.

They have used their combine-planter just for milo planted in wheat stubble, but they think it would work for other crops, such as seeding soybeans in wheat stubble as the wheat is harvested. One problem, though, is that planter boxes are mounted up high, which would be inconvenient for filling with heavy seed like soybeans.

When they want to use the combine for regular harvesting, the Hilvetys simply loosen the bolts and remove the planting units, leaving the tool bars in place.

## Build Yourself A "Fuelless" Tank Heater

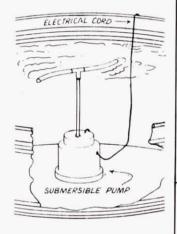
One of the best "inflation fighting" ideas we've seen lately is an amazingly simple "fuelless" way to keep water tanks for livestock ice-free for about half the cost of fuel oil, electric, LP-gas or other conventional tank heaters.

"It really works slick and has cut our tank heating costs in half," says Paul Warsicki, owner of the Double JJ Resort Ranch, Rothbury, Mich. He teamed up with his maintenance supervisor, Ray Rickard, to develop the low cost way to keep water tanks ice-free.

The device consists of a small submersible pump purchased from Sears Roebuck for about \$40. The small, electric-driven pump sets on the bottom of the tank and constantly recirculates water in the 300 gal. water tank to keep it from freezing.

"It'll keep the tank completely ice-free down to about 15° below zero. If it gets colder, a sheet of ice will form on the surface but we've never had it get so thick that the animals themselves couldn't break it with their noses." Paul told FARM SHOW. He notes that "Ray got the idea while watching an aerator placed under a pier in a lake for aeration. He noted that the water never froze where it was bubbling."

The submersible pump, rated at 115 volts and 5 amps. is guaranteed for 10,000 continuous hours. To keep out sediment. Ray punched holes in the sides near the pail's top, set the pump inside the pail, then set the pail and pump in dead center at the bottom of a 300 gal.

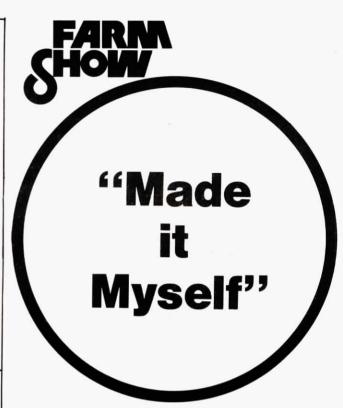


round tank made of poured concrete. An automatic float keeps the water level in the tank at a constant depth of about 2 ft.

The idea behind the submersible pump is to stir and recirculate the water to keep it moving, as in a fast-moving stream.

Ray modified the pump by equipping it with a large "T" made out of ½ in. pipe. The horizontal pipe on the "T" is about 1½ in. below the water surface. It's about 3 ft. long. Each end is bent slightly so water coming out hits the tank sides at a slight angle rather than head-on for better. more turbulent circulation of the water.

"It only took a day or two for our horses to get used to water movement in the tank," says Paul, who adds this reminder: "Be sure when stringing the electric cable that it's protected so animals can't chew it."



Some of the best new products we hear about are "made it myself" innovations born in farmers' workshops. If you've got a new invention or favorite gadget you're proud of, we'd like to hear about it. Send along a photo or two, and a description of what it is and how it works. Is it being manufactured commercially? If so, where can interested farmers buy it? Are you looking for manufacturers, dealers or distributors?

Harold M. Johnson, Editor



Here's A Low Cost Shop Stove

For about \$12, plus an old 55 gal. barrel and an LP-gas tank, you can build yourself a 100,000 btu shop stove that's portable, allowing you to haul it around to help heat stubborn engines in below-zero weather.

The \$12 cost is for a propane torch (Model LT3-6) from Flame Engineering. It hooks to an ordinary LP tank and can be fired

into a hole in the side of a 55 gal. barrel, as shown in the photo. "Since it burns oxygen, be sure you use it in a well ventilated shop or other building," a spokesman warns.

For more details, contact: FARM SHOW Followup, Flame Engineering, La Crosse, Kan. 67598 (ph 913 222-2873).