



Soybean Digest photo by Debra Ferguson

Two-wheel dolly allows operator to turn on 90° angle without hitting tractor wheels.

"BEST WAY TO RUN TWO TILLAGE TOOLS TOGETHER"

Two-Wheel Dolly Ties Machines Together

"We're replacing two 2-wheel drive tractors with a single 4-wheel drive machine," says Eddie Anderson, Dyersburg, Tenn., who built a 2-wheel "dolly" to pull an 8-row Do-All or rotary harrow behind his 25-ft. 9-in. tandem disk on the 2,800 acres of beans he farms with his father J.W. Anderson.

The dolly wheel consists simply of a small two-wheel wagon weighted with a concrete block. He attaches the tongue on the dolly wheel to the tandem disc, which is hitched to the tractor. The tongue of the trailing Do-All or rotary hoe hitches to the rear of the dolly wheel.

When Anderson first started trying to hitch up two implements, he soon found he needed something in between so the two wouldn't hit on corners. With the dolly wheel between, he says he can now turn on a 90° angle without hitting. He says it also works as a leveler on the rear trailing implement so that when the disc in front is raised it doesn't force the rear of the

trailing implement to dig in.

Concrete blocks on the unit keep the wheels on the ground when turning and help it trail better on the road.

Anderson used half of an old 4-wheel trailer to build the dolly wheel. He reinforced it, installed the tongue, and built a 4-in. deep metal box on top to hold approximately 12 cubic feet of concrete. Hydraulic lines for the rear implement run over the top.

Anderson told FARM SHOW that it's important to move the weight slightly to the front of the dolly wheel axle in order to stabilize the front tongue.

Wheel spread on the dolly is 5 ft. Distance from the rear drawbar hitch to the front of the tongue is 9 ft. The concrete weight block is 12 by 14 by 40 in. in size.

For more information, contact: FARM SHOW Followup, Eddie Anderson, Rt. 5, Box 274, Dyersburg, Tenn. 38024 (ph 901 285-0072).



Concrete weight is positioned slightly forward to stabilize front tongue.

THREE 82-GAL. WATER TANKS GATHER AND STORE HEAT

The Solar Box: New Way To Harness The Sun

If you've looked at solar heat in the last few years and rejected it because of complicated hookups and mounting requirements, the "Solar Box" might be the answer.

Except for a small squirrel cage fan that's easily accessible, there are no moving parts on the unit. And, unlike most home or farm building solar units, you don't have to punch holes in your roof to install it. The Solar Box is simply that — a large box-shaped unit that mounts outside the building to be heated, connected to it only by pipes and a duct that extends through a small hole near the foundation.

Here's how the system works:

The box has a 5 by 5-ft. base and is 9 ft. tall. It's enclosed on three sides by double-walled "Tuffak" polycarbonate glazing, a newly imported solar-designed material that's 100 times tougher than glass and much more heat retentive, according to Frank Egan, Bloomington, Minn., who designed and is distributing the Solar Box.

There are three 82 gal. "water heaters" inside the box that act as collectors. The tanks are standard steel well-holding tanks painted flat black. They stand in an upright position and are hooked in series by galvanized pipe that connects directly to the home water system. As water is used in the house, it is simply pulled through the tanks, where it is heated up and then sent back to the house. No additional water pressure is needed.

The 246 gal. of water in the tanks acts as heat storage and heats up the air in the box around the tanks. That warmed-up air is pulled out of the box and through a duct into the house. Since the tanks heat up during the day, the system provides warm air throughout the night.

"Besides the fact that the unit is easy to install, the design is simpler than any other domestic solar unit on the market," Egan told FARM SHOW. "The solar collector doesn't move, yet the sun will strike one or more of the panels from early morning to late afternoon.

The Solar Box's all-steel frame is totally insulated to prevent heat loss during cold weather. Egan says it meets all federal standards to qualify for federal and state income tax credits. A redwood Solar Box, available for special applications, is expected to receive approval soon as the first wooden solar collector ever to meet



Solar box (5 by 5, by 9 ft. tall) is enclosed on three sides by special material that captures, holds solar heat.

government standards.

Water temperature in the box, depending on the amount of sun and the time of year, runs from 92° to 132°, and the air temperature is not much lower, according to Egan. The duct running from the box to the house is 12 by 10 in. Both the water pipes and hot air run through it.

Although the first prototype Solar Box has been successfully factory tested for the past year, it has not yet been installed for actual home heating. Egan plans to work closely with buyers of the first units off the production line.

The Solar Box is designed to sell as a kit. The all-steel frame, double-walled "Tuffak" glazing, ducting, and complete installation instructions sell for \$1,900. The tanks (available from Sears), plumbing, fan, and footings (if needed) will cost another \$500 to \$1,000. In some states, up to 60% of the purchase price qualifies for income tax credits, according to Egan.

For more information, contact: FARM SHOW Followup, Frank Egan, Solar Box & Tower Co., 8758 Lyndale Ave. So., Bloomington, Minn. 55420 (ph 612 884-7677).