



The car is 13 ft. long, 7 ft. wide and 39 in. high. Mike Brown photo

AT SPEEDS UP TO 40 MILES PER HOUR

Sun-Powered Car Crosses Australia

It resembles a bathtub with a ping-pong table for a top, but it's actually an innovative car that crossed the Australian Outback powered by the rays of the sun.

Ninety square feet of solar cells fed two 12-volt car batteries and a DC motor, driving the 330-lb. vehicle from Perth to Sydney, a trek of 2,538 miles, in only 19 days and 21 hours.

Larry Perkins, an Australian race car driver, and Hans Tholstrup, a Danish adventurer, took six hour stints at the wheel of "The Quiet Achiever," which averaged 15 miles per hour and reached a maximum speed of 40 miles per hour.

Driving from 10 a.m. to 4 p.m. to

take advantage of the sun, the pilots said the panels worked better than expected, and only bad road conditions (two flat tires) prevented them from making the journey in two weeks. The trip, which was sponsored by British Petroleum under its \$150,000 "Solar Trek" project, was expected to take four to five weeks.

Perkins built the \$15,000 solar car from fiberglass and a lightweight tubular steel chassis in his Melbourne workshop. The pilots controlled the car by spool and cable steering.

(Reprinted from Solar Utilization News, Estes Park, Col.)

WEIGHS WHATEVER YOU PUT INTO THE BUCKET

Portable Scale For Front-End Loaders

"It fits any tractor loader that lifts hydraulically and accurately weighs whatever you put in the bucket," says T.J. Shambaugh, Jr., developer of the new easy-to-use, do-it-yourself weighmaster. It consists of a gauge that measures the amount of hydraulic pressure needed to hold the loaded bucket at a certain height. The pressure reading is calibrated to pounds by a formula which Shambaugh provides.

To install, you tee into the hydraulic line between the valve and the lift cylinder and install the hose that runs to the gauge. You then raise the loader with the bucket empty and set the gauge at zero. By adding predetermined weights, you calibrate the gauge which Shambaugh says is accurate to within .5%.

weight of the load with the bucket at the same height each time and with the tractor on fairly level ground.

The gauge used depends on the tractor's hydraulic system. Besides a

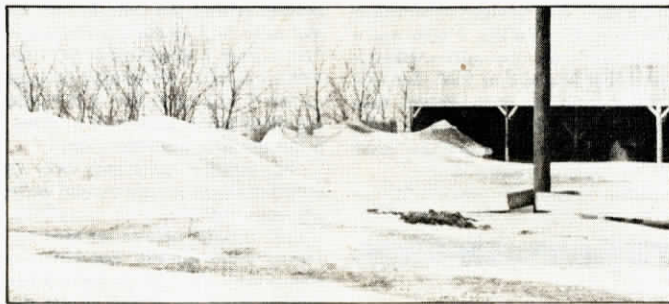


Shambaugh sells do-it-yourself plans for the Weighmaster.

gauge, you'll need hydraulic hose and a mounting bracket.

Shambaugh's plans are available for \$25 and include installation instructions, calibration formula, parts lists and places to buy the needed equipment. He estimates equipment costs at less than \$250.

For more information, contact: FARM SHOW Followup, T.J. Shambaugh, Jr., Rt. 1, Box 79A, Oakley, Ill. 62552 (ph 217 763-5651).



INSUFFICIENT SPACE: A lack of space between a tree shelter belt and this building resulted in a snow-jammed interior. As a result, the building provides poor shelter for storm-driven beef cattle. Provide at least 100 ft. of space between a building and the nearest row of trees in a shelter belt. Snow comes up, over and then swirls to the ground past the trees.

NEW BOOK DETAILS 124 TYPICAL MISTAKES

Building "Goofs" To Avoid

One of the best buys we've seen lately is a new low-cost book (only \$3.95) that illustrates "goofs" to avoid when you undertake your next construction or remodeling project.

Called "Builder Boo-Boos," this 64-page book is filled with photos and descriptions which show actual farm building, remodeling and equipment installation mistakes made over the years by farmers and contractors.

The accompanying photos are samples of 124 typical and costly mistakes highlighted in the book, published by Frank Lessiter, editor-publisher of Farm Building News. "All of the construction errors featured in the book were studied firsthand on farms and ranches across the country," says Lessiter.

To order, send \$3.95 per copy, plus 75¢ each for postage and handling, to: Builder Boo-Boos, c/o Farm Building News, Book Dept., 260 Regency Court, Waukesha, Wis. 53186 (ph 414 782-0604).



HIT A VEIN: The contractor struck a water vein while excavating this manure pit. Always dig several test holes to check water level, soil type and rocky conditions before tackling below-grade construction.



DANGEROUS IDEA: While installing a ladder in a manure pit can improve access, it can also lead to disastrous exposure to manure gases. A good suggestion is to hinder access to such dangers.



SENTIMENTAL TIES: When more room is needed, the first impulse is to add a lean-to. Making a "clean break" with an obsolete barn is often difficult. This dairyman attached a 40-cow free-stall unit onto the site of his 1918 vintage barn. Then, the milking parlor and milkroom were tacked on too. The folly of the idea was plain to the farmer even before the paint was dry. Some 18 months later, the old barn was removed to make room for another 40-cow free-stall area. The old barn would have been much more useful for storage if the free-stall setup had been built 200 ft. away.