

## STOPS WATER FROM BACKING UP UNDER SHINGLES

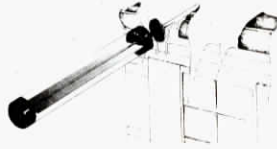
# Solar-Powered Roof De-Icer

Look what's new under the sun — a solar-powered roof de-icer from Tindev, Inc., Lincoln, Mass., that solves leaks caused by roof ice buildup.

Called the Sorod Ice Lance, it uses a tiny solar collector to melt small corridors through ice dams at the edge of shingled roofs, preventing water buildup and damage inside from dripping water.

Ice dams are formed when heat from inside the house rises through the roof and melts snow. As the snow melts, water runs down the roof to the unheated overhang where it freezes, forming a ridge of ice. This ridge dams the continuing flow of water, which backs up over the heated portion of the roof. Eventually this water backs up under the shingles and leaks inside the house.

The Sorod Ice Lance is a narrow tube filled with a refrigerant. The col-



**Solar collector passes heat to refrigerant-filled tube, 4 ft. long.**

lector, a black aluminum fin, absorbs energy from the sun. A sealed plastic cylinder gathers this stored heat and passes it to the tube. The refrigerant begins to bubble and the heat passes through the length of it. It melts a small corridor along the tube, almost too small to see but large enough to conduct backed-up water to the edge

of the roof.

The 4 ft. Sorod will protect overhangs up to 3 ft. wide. It needs sunlight to work effectively and will not work at night, during heavy overcasts or when badly shaded. With most buildings, this is not a problem, however, as the dammed water need not be continuously drained. Periodic relief is generally sufficient, says Fred Tingley, Tindev representative.

One Sorod can protect 10 to 15 running ft. of roof, and is fastened in place with a single bracket. The black collecting fin is pointed toward the average winter sun position. A package of 4 rods sells for \$32. Shorter Sorods for overhangs less than 1½ ft. wide are also available.

For more information, contact: FARM SHOW Followup, Tindev, Inc., Route 1, Box 325, Lincoln, Mass. 01773 (ph 617 259-9641).

## ALSO BURNS COBS, OR USED CRANKCASE OIL

# Wood-Burning Water Heater

According to different studies, and depending on which area of the country you live in, statistics tell us hot water heaters use between 20 and 30% of the total energy consumed in American homes.

Appropriate Technology Importers, Inc., El Rito, New Mexico, says 1/3 of your monthly utility bill is a high price to pay for hot water. Their answer: A wood-burning water heater that also operates on used crankcase oil.

The heater is a takeoff on rugged water-heating units used in Mexico for more than 50 years. It will bring its maximum capacity of 14 gal. to near boiling within minutes, using wood scraps, bark, corncobs, or shredded cardboard boxes, according to the company.

The heater is constructed of heavy 18-ga. galvanized steel and is designed for a maximum pressure of 80 psi. It may be just what you need out in the barn, or in your workshop, where you occasionally need hot water.

According to the company, the system is completely compatible with existing plumbing. It requires only a pressure and temperature relief valve, available from most hardware stores for about \$6.00.

The 14-gal. capacity of the heater is less than conventional water heaters. However, the unit is designed to heat up quickly and provide continuous hot water flow for as long as the fire is maintained, according to company representatives.

The heater is 11.5 in. in diameter, 57 in. high and weighs 50 lbs. The firebox is 11 in. by 22½ in. The stove pipe is 4 in. dia.

The model R-3 for wood sells for \$99.50. A second model, the DM-3,

which burns wood, kerosene or used crankcase oil, sells for \$124.

For more information, contact: FARM SHOW Followup, Approp-

riate Technology Importers, Inc., P.O. Box 5, El Rito, New Mexico, 87530 (ph 505 581-4742).



**Wood-burning water heater is completely compatible with existing plumbing, according to manufacturer. One model burns used crankcase oil, or kerosene.**

# Look! A Loader Mounted Grain Auger

Moving any 50 ft. long grain auger takes a lot of muscle. But add a 10 in. screw and it becomes a beast nobody likes to wrestle with.

Not so for Richard Baker, of Regina, Saskatchewan, Canada. He needed a big auger to move the mountain of grain he produces each year on his farm.

To get a big auger that he could move easily around the farm, and raise to the filler hole of his granaries, he built his own, designing it for mounting on the front-end loader of his tractor. The idea, born in his farm workshop, is now being produced commercially by Brandt Machinery and Manufacturing, Regina, Sask.



**Baker attaches support legs to auger to remove it in less than 10 min.**

The upper part of the loader is fastened to the auger by a pin, and the bottom merely rests in a cradle on the back post. "It takes only about 10 min. to mount the grain auger, or remove it from the tractor. That makes it real easy to use the front-end loader for other jobs around the farm, says Baker.

The auger is driven from the bottom by the tractor's pto. The drive shaft telescopes to allow the auger to be raised or lowered.

The auger is set off to one side of a "cab-less" tractor so there's ample operating room for the driver. It's raised and lowered by the front-end loader. When the loader is in the down position, the auger is nearly horizontal and easily moved along the highway, or under power or telephone lines.

Two models are being manufactured. One is an 8 in. auger 45 ft. long, and the other a 10-in. unit 50 ft. long. List price is \$1,800 for the smaller unit, and \$2,250 for the bigger one.

Gavin Semple, of Brandt Mfg., says the company is testing an optional hydraulic drive for both models. This testing will determine if that option will be offered, in addition to the pto drive, or if it will replace it.

For more information, contact: FARM SHOW Followup, Brandt Machinery and Mfg. Ltd., 705, Regina, Saskatchewan, Canada S4P 3A2 (ph 306 525-1314).